

THE AIRSHIP BOYS' OCEAN FLYER

or New York to London in Twelve Hours



H. L. SAYLER



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OR
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IN THE PILOT ROOM OF THE *FLYER*.

The Airship Boys' Ocean Flyer

or, New York to London
in Twelve Hours

BY

H. L. SAYLER



Illustrated by S. H. Riesenberg

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THE AIRSHIP BOYS' OCEAN FLYER

CONTENTS

CHAPTER	PAGE
I THE MAKING OF A NEWSPAPER STORY.	9
II WHAT A REPORTER SAW IN THE DARK.	23
III THE VETERAN TAKES OFF HIS HAT TO THE CUB	36
IV THE AIRSHIP BOYS MAKE THEIR AP- PEARANCE	51
V A BEWILDERING PROPOSITION.....	67
VI AN OLD HOME AND A MODERN BUSI- NESS	83
VII NED NAPIER ADVANCES SOME THEORIES	97
VIII THE <i>Ocean Flyer</i> CREW IS COMPLETED	113
IX DUTIES OF THE <i>Ocean Flyer</i> CREW...	127
X BUCK STEWART RECEIVES NEW ORDERS.	141
XI SHAPING A NEW COURSE.....	156
XII HOW THE FLIGHT WAS TO BE MADE...	168
XIII ROY OSBORNE'S "PICK-UP CRANE"...	182
XIV CAPTAIN NAPIER'S NERVE IN MID-AIR SAVES THE CARGO.....	196
XV IN WHICH NED'S LIFE IS SAVED.....	210
XVI AN UNEXPECTED TRIBUTE.....	224

XVII	WHAT HAPPENED AT THREE FORTY- THREE P. M.....	237
XVIII	THE RACING PIGS OF FUNDY.....	252
XIX	A CHANGE OF PLANS BY WIRELESS....	269
XX	THE FIRST SIGHT OF LONDON.....	284
XXI	THE MARBLE ARCH GATE, HYDE PARK.	298
XXII	EXTRACTS FROM THE LOG OF THE <i>Ocean</i> <i>Flyer</i>	312

LIST OF ILLUSTRATIONS

In the pilot room of the <i>Flyer</i>	<i>Frontispiece</i>
In the “local room” of the New York Herald..	45
Picking up the matrices	206
The end of the flight, London.....	305

The Airship Boys' Ocean Flyer

OR,

New York to London in Twelve Hours

CHAPTER I

THE MAKING OF A NEWSPAPER STORY

It was a few minutes of eleven o'clock at night. One of the many editions of the great New York *Herald* had just gone to press. But in the big, half-lit room where editors, copy readers, reporters and telegraph operators were busy on the later editions to follow, there was no let-up in the work of making a world-known newspaper.

There was the noise of many persons working swiftly; the staccato of typewriters, the drone of telegraph sounders and now and then the sharp inquiry of some bent-over copy reader as he struggled to turn reportorial inexperience into a finished story. But there was no confusion and none of the wild rush and clatter that fiction uses in describing newspaper offices; copy boys were not dashing in all directions and the floor was not knee deep with newspapers and print paper.

Caldest of all was the night city editor. With a mind full of the work already done and in progress, he was as alert mentally as if he had just reached his desk. Five hours yet remained in which New York had to be watched; five hours, in any one minute of which the biggest news on hand might fade into nothing in the face of the one big story that every editor waits for night after night. And the night city editor, knowing this, dropped his half-lit pipe when his desk telephone buzzed.

"Stewart? Yes! Yes!" he answered quickly in a voice so low that not even his busy assistants heard him. "Where are you? What are you doing?"

"In Newark," came the quick response, "and we landed it. It 's a peach. That aeroplane tip you know. It panned out all right."

The night city editor had seemed perplexed for a few moments but at this his face cleared.

"How big? What 's new?"

"Biggest airship ever made; biggest planes; biggest engines—cabin and staterooms; two hundred miles an hour—"

"See it yourself?"

"Been workin' in the factory three days; American Aeroplane Works; got story cinched. Machine flew to-night first time. It 's a beat."

“Got talks?”

“Not straight, but I ’ve heard ’em talkin’.”

“What ’s the idea? Is it a war ship?”

“Got everything but that. Will some one take it by phone? I can get to the office quarter after twelve; got some stuff ready.”

“Who ’s back of it? Whose machine is it?”

“Aerial Utilities Company; those Chicago boys, Napier and Hope and their friends.”

The editor thought a moment, glanced at the clock on the wall where the hands pointed to eleven and then said:

“If you can be here by a quarter after twelve, hurry in. If you can ’t make it, phone. Get up all the stuff you can. Are Napier and Hope at the factory?”

“They made a test to-night. I know where they went. I was outside the yard. They were gone from ten o’clock till ten twenty-five; were all over New York and forty miles to sea. It—”

“Grab the eleven fifty express and hustle in,” interrupted the man at the telephone. “It ’s good stuff and ’ll stand a couple o’ columns.”

Hanging up the receiver, the night city editor settled back in his chair, finished lighting his pipe and then, his head leaning in his clasped hands, seemed to be in a reverie. But this did not last

long. While he had talked to "Stewart in Newark" three young men had hurried to his desk and laid on it stories or parts of stories on which they had been working. These reporters were now standing a few feet away awaiting further orders or dismissal for the night.

"Dick," exclaimed the editor as he suddenly unclasped his hands, leaned forward over his desk again and shuffled the copy on it into a little bundle, "we 'll want about two and a half columns in the last edition." As he spoke, a middle-aged man in his shirt sleeves—for the night was mid-June—leaned backward from a near-by big table at which a dozen men were busy cutting, rewriting and pasting copy, and took the little bundle of manuscript from his superior's hands.

The waiting reporters groaned inwardly. They knew that this was probably the death warrant for their own evening's work. Dick, the man addressed, asked nothing and made no inquiry. He knew that something big had turned up. As head copy reader the securing of this "something" was no business of his. Nor did the nature of it stir his calloused curiosity. His orders were to save two and a half columns of space and this he would do. When the story came, he and his assistants would see that it was two and a half columns long and no more.

But this was not the attitude of the three reporters yet waiting near the editor's desk. This man was no longer in a reverie. In those few minutes he had "blocked out" his big story; he already saw it in print and, unlike Dick, he was now ready to go after it.

"Anything more, Mr. Latimer?" asked one of the reporters eagerly, for each of them had now scented a "beat" and all, forgetting the probable fate of their earlier evening's work, were eager to be in on it.

Mr. Latimer arose and without reply hurried away in the direction of the night editor's desk. When he returned, his pipe now sputtering viciously, he called: "Dick, make that two columns." Then he turned toward the still lingering reporters. They moved to his desk, each trying to attract special attention.

"Chambers," said Mr. Latimer to the youngest of the trio, "get Governor's island on the phone and see if they 'll put you on Colonel Fred Grant's wire. If you can 't raise him by phone go down to the Ship News office and have the boys take you over in the boat. We want a good talk with him on this idea: What military prestige will it give the country that is the first to perfect an airship that can travel two hundred miles an

hour—an aeroplane that can actually carry men and bombs? Point out that this means across the Atlantic in fifteen hours. Make him talk new stuff, practical, and cut out the Jules Verne patter.”

Chambers, young and inexperienced, hurried away without a question, knowing well enough that this interview was to fit into another story and that it was his business to get it, and the earlier the better.

“Glidden,” said the night city editor, turning to the oldest reporter of the three, “did n’t you write a Sunday story a few weeks ago on ‘The Limit of the Automobile’?”

“Yes, sir,” was the prompt reply of the pleased young journalist.

“Have you some ideas on the possibilities of the aeroplane?”

“I have,” was the prompt reply. If Glidden had gone further he would have added, “I ’m getting up another story on that line now.”

“That ’s good,” broke in Mr. Latimer. “We ’re going to print a big aeroplane story in the morning. I want a ‘lead.’ The man on the story can ’t write it. I can ’t tell you anything except that this story concerns the first real airship. Give me half a column of what a real aeroplane ought to do—”

“It ought to go ten miles up in the air,” broke in Glidden impulsively as if anxious to demonstrate that he really had some ideas, “and the time will come when the flying machine will stay in the air more than five days. It will carry fifty people, cross the Atlantic or Pacific and sail two hundred miles an hour—”

“That ’s enough,” laughed the editor. “Our machine does two hundred miles. Go to it.”

Glidden, who should have had Stewart’s assignment on the aeroplane story, wanted to ask more but he was too wise to do so. A few minutes later he was back at his typewriter, nervous and excited over the part he was to take in the making of the next morning’s “beat.”

The work of the third man was better known to Mr. Latimer.

“Winton,” he began as if sure that his orders would be carried out to the letter, “you ’ve heard of the Airship Boys—those Chicago youngsters who have been starring in aeronautics for several years?”

“I know Bob Russell personally,” answered Winton. “He ’s the newspaper man from Kansas City who has been with the boys in all their stunts.”

“Did he ever work in New York?” inquired Mr. Latimer.

"I think not. I believe he 's in business with the Airship Boys. Used to work on the Kansas City *Comet*."

"Could n't get hold of him?"

"If it 's about some new project of these boys," laughed Winton, "it 's not worth while. They 're all clams concerning their own affairs."

"But is this the outfit that interested Mr. Morgan in the Universal Transportation Company last summer?"

"I never worked on the story except once when I tried to get Russell to talk and could n't. They had a suite of offices in the Waldorf last July."

"Call the Waldorf and see what you can find."

Five minutes later Winton was back at Mr. Latimer's desk.

"Five or six persons connected with the Aerial Utilities Company had apartments and offices in the hotel until the middle of last August. Then the offices were moved to Chicago. There seems to be a group of these people, all interested in aeroplanes on a big scale and their headquarters I think are in Chicago."

Mr. Latimer touched a button and hastily wrote a note.

"Hand this to the telegraph editor," he said to the messenger as he gave him this message:

“Craig, Tribune, Chicago. Rush anything on Aerial Utilities Company, organization and business. Also matter concerning Airship Boys, Napier, Hope and Russell.”

Then he turned to Winton again.

“Story in to-night about those boys and a big aeroplane. Napier and Hope and maybe Russell are not in Chicago, but somewhere in Newark. Their newest idea was manufactured by the American Aeroplane Company in Newark. Call the works on a chance; like as not you won’t find any one there. Look up the head of the company. Raise him on the phone. If he won’t talk about the new airship make him tell you where the Airship Boys are. Try the hotels by phone. Must have something about these young men. The man on the story missed a talk with ’em.”

Winton rushed to the telephone room and Mr. Latimer, with another glance at the clock, put the Newark “beat” aside for a moment while he gave his attention to the accumulating copy received from the local news bureau and late evening assignment men. With instructions for each, he had “covered” an East Side tenement fire by rushing four men to the scene and had personally called up and talked to a leading financier on a financial story when Winton returned.

"J. W. Atkinson is president of the Aeroplane Company," Winton reported. "No one at works. Got Atkinson on phone. He won't talk but acknowledges Airship Boys are in Newark. Won't say where. Can 't find 'em at hotels."

Without answering, the night city editor turned to his telephone.

"Get me the Newark office," he ordered. "Nathan, if he 's there. Go to the library," he added, speaking to Winton, "and dig up a story on these kids. There 's plenty there. Get half a column. See if we have any pictures."

While Winton hurried away on his new task, the telephone rang.

"Newark?" asked Mr. Latimer. "Is that Nathan?"

"Mr. Nathan 's out eatin' supper," replied a juvenile voice.

"Go get him. Tell him this. Ready? Put down J. W. Atkinson. Got it? J. W. Atkinson, president American Aeroplane Company. Tell Nathan to see Mr. Atkinson at his home and find where Ned Napier and Alan Hope can be found. Put the names down: Ned Napier and Alan Hope.

"I know 'em," interrupted the youthful voice. "Them 's the Airship Boys."

"Tell Nathan not to leave Mr. Atkinson until

he learns where those boys are stopping: where they are in Newark. Got it?"

These events had taken place within fifteen minutes. At ten minutes after eleven Mr. Latimer again put the Newark story aside temporarily and gave all his time to rounding up his part of the next edition. At eleven thirty o'clock Glidden, who was to provide the material for a general "lead" to the big "beat"—none of the details of which he even knew, turned in five hundred words. Mr. Latimer paused in his other work and glanced hastily at the pages. Then he looked at the clock, leaned back in his chair and read each page.

"Good stuff," he announced without even a smile as he finished. "That 's the idea; just what I wanted. Stewart is coming in from Newark with the story a quarter after twelve. Get your supper and be back by that time. I want you to help him shape up his stuff. Chambers and Winton will have 'adds' to the story."

A quarter of an hour later Winton reported with his sketch of the Airship Boys. His superior did not read the matter—he was sure enough of Winton—but spiked it with Glidden's copy.

"No pictures," explained the reporter, "except one in the *Scientific American* of last July show-

ing working drawings of a steel monoplane—the one they used in the New York-Chicago flight.”

“Get it and take it to the picture man. Tell him to make a two-column cut of it. No pictures of the young men?”

“Not on file.”

“That ’s good,” said Mr. Latimer with his first smile of the evening. “It ’ll make a good ‘follow’ to-morrow. By the way, did you get a story of these youngsters right up to date?”

“No,” answered the reporter, somewhat regretfully, “I could n’t find anything about them after their record flight in a steel monoplane between New York and Chicago last July. I know they were in New York at their Waldorf offices until August. But I can’t find anything about them since that date. If they ’ve got a new idea, they ’ve had since last August to work on it unmolested by the newspapers.”

Mr. Latimer was shaking his head as he refilled his pipe.

“Get your supper and hurry back. Stewart ’ll be here in fifteen or twenty minutes. Then we ’ll see what we can all do to find out what they ’ve been doing since August. The story is gettin’ to look good.”

Winton was about to hasten away when his

interest got the better of his judgment and he violated one of the unwritten rules of the *Herald* office: he questioned his superior.

"I know it is n't my business, Mr. Latimer," he began, hesitatingly, "but did n't Stewart say they have made a new machine that can fly two hundred miles an hour?"

The night city editor nodded his head.

"And he has the details of the machine?"

"All of them," replied the editor. "But he 's missed the main thing—the story. What are they going to do with such a craft? Why should they test it out in secret—under cover of night?"

"And that 's what we are trying to find out?" asked Winton, showing confusion.

"Certainly," was the response. "The mere account of a new aeroplane is n't worth two columns in the *Herald*. That 's only half the story. Its purpose and possibility make the real story."

Winton leaned over the desk, his face flushed.

"I know what those boys have done in the past," he said in a low voice. "There 's only one thing left for them to do now. If you can 't find them and don 't know what that is I 'll make a guess for you: they 're going to cross the Atlantic."

"Certainly," was Mr. Latimer's response.

“My own idea precisely. And that is the story the *Herald* is going to print in the morning.”

But the night city editor was wrong. The *Herald* did not print such a story in the morning, as will be set forth in the next chapter.

CHAPTER II

WHAT A REPORTER SAW IN THE DARK

Stewart, the reporter who had been working in the American Aeroplane Company's plant for several days and who had telephoned the tip on the first flight of the wonderful new machine, reached the *Herald* office a few minutes ahead of his schedule. He was hot and excited. As he hurried to Mr. Latimer's desk he drew from his pocket a wad of copy—a part of his story already prepared. The night city editor looked at the clock—he seemed always watching the clock.

"Twelve . ten," Mr. Latimer began without question or comment and waving back the proffered manuscript. "We want a column. Take an hour and do it right. Tell what you saw—don't speculate. Tell about the new machine, and don't be technical. We 'll make the 'lead' when we see what you 've got—"

"This is ready now," interrupted Stewart, mopping his brow. "I did it on the train."

"Use it in your story; put it together yourself. It 's for the last edition. By the way, you did n't

find what they 're going to do with the new airship?"

"Everything but that," confessed Stewart. "No one in the factory seems to know. But it seems to me that they 'll certainly use it first to cut down the time on that New York-Chicago airship line. Four or five hours to Chicago would be quite a card."

"Why not fifteen hours across the Atlantic?" asked Mr. Latimer with a significant twinkle in his eyes.

"You 're right," exclaimed Stewart. "I hadn't thought of that. Say, that 's great; first airship across the ocean. Sure! They can do it. That 's the idea. That 's my 'lead'—"

The night city editor raised his hand.

"Don't bother about the 'lead.' Do what I told you: write what you saw and a description of the machine. And you might start right away if you like."

Stewart, coat off and pipe going, was just well into his story when Chambers reported from Governor's Island. He had seen Colonel Grant.

"But," explained the reporter to Mr. Latimer over the telephone, "he said it was too late to talk to-night. He 's offered to prepare a statement for me to-morrow."

“What did he say to-night?” snapped the night city editor.

“Well, he said America ought to be proud of its advance in aeronautics; that there were great possibilities in aerial navigation—”

“Yes,” broke in Mr. Latimer, “but did you think to mention what I told you to ask him? What military prestige it would give a country to own the first aeroplane that could fly two hundred miles an hour?”

“Yes, sir,” was the prompt answer, “but he said he ’d rather not be quoted on that.”

“What was it?”

“He said he rather thought it might give prestige to any one of the great nations and that if America had such a ship that it ought to keep it and not let some European government snap it up. He said, as a nation, he thought we were rather behind the other powers in the development of the airship in a military and naval way.”

“Did you promise not to quote him?”

“No, sir. But—”

“Glidden,” called Mr. Latimer to that young man, who had just returned, “here ’s Chambers on the wire at Governor’s Island. He ’s had a talk with Colonel Grant: hot stuff about neglect of government to develop airships for naval and

military purposes: thinks our new aeroplane gives us balance of power among the big nations. Take it and get up a good story on it. Here 's Glidden, Chambers," he continued, turning to the telephone again, "he 'll take your stuff."

A moment later Glidden was at a desk and the waiting Chambers had been switched to him. With almost one movement the more experienced Glidden caught up the receiver and, with a piece of paper rescued from the floor and a stub of a pencil borrowed from a man next to him, was ready.

"Shoot it, Chambers," was his salutation and the interview was under way.

Several pages of Stewart's story had now reached Mr. Latimer's desk. Before he gave it his attention, he took up Winton's matter on the *Airship Boys* and glanced hurriedly through it. This apparently called for no comment and he passed it at once to Dick, the head copy reader.

"Here 's the first of that two-column story for the last edition. It 's the last 'add.' Use all of it. There 'll be a talk with Colonel Fred Grant to follow the main story."

Dick shuffled the sheets together without a glance at the words on them, spiked the pages on a spindle, readjusted his pipe and raised his green eye shade.

"Who 's writin' the story?" was his only response.

"Stewart," said Mr. Latimer.

"A cub?" grunted Dick as he looked at the watch on the blotter before him. Then he jerked his head to show the contempt all old copy readers feel for inexperienced reporters. "It 's twelve thirty," he added as a part of his groan.

"He may not be a cub after to-night," was Mr. Latimer's tart rejoinder as he at last tackled Stewart's copy.

"At ten twenty o'clock last night," Stewart's story began, "an airship that is undoubtedly destined to make the first flight across the Atlantic ocean, was given a secret test from the yards of the American Aeroplane Company's plant in South Newark.

"That the experimental flight was successful in every way is attested by the fact that this newest and most complete aeroplane was in the air twenty-five minutes and attained a speed of between 180 and 200 miles an hour. The flight was cloaked in mystery and the only spectators were the inventors and owners of the airship, the superintendent and the president of the Aeroplane Company and a reporter for the *Herald*.

"While every effort has been made to keep any

intelligence of the new marvel from reaching the public at the present time, the record breaking test made last night was observed and timed. This mechanical, sky-piercing meteor was driven by man thirty or forty miles out to sea and, concealed by the shadows of night, it returned successfully and unseen directly over the skyscrapers of New York."

Without reading further Mr. Latimer reached for a pad of copy paper, a pencil and his shears. In a few minutes Stewart's carefully prepared story had been transformed by scissors, paste pot, interlineations and new lines into this:

"This mechanical sky-piercing meteor last night set what may be the ultimate record for man's aerial flight. Three miles in sixty seconds or one hundred and eighty miles an hour, is the last proof of man's complete conquest of the air. With London but fifteen hours from New York, the crossing of the Atlantic is assured. And, in the language of Colonel Fred Grant, 'this assures the superiority of the United States as a naval power.'

"This new marvel was given its initial test last night. At ten twenty o'clock the airship that is destined to revolutionize aeronautics, rose mysteriously from the yards of the American Aero-

plane Company's plant in South Newark. Within the next twenty-five minutes it had darted forty miles straight out to sea and then, concealed by the shadows of night, returned successfully and unseen, directly over the sleeping skyscrapers of lower New York.

"This historic flight, cloaked in darkness, was made with no spectators other than the inventors and owners of the airship, the superintendent and the president of the aeroplane works and a reporter for the *Herald*. While every effort had been made to keep intelligence of the wonderful invention from the public at the present time, an account of the secret test as well as a complete description of the aeroplane itself, is given herewith in detail."

By the time the copy boy had laid Stewart's next batch of copy on the night city editor's desk Mr. Latimer had passed all of the first "take," marked "lead to come," over to Dick, the head copy reader, and the big aeroplane "beat" was on its way into print. Few changes were made in the rest of Stewart's story. Having finished his first few pages and reached the real narrative, he wrote rapidly and easily.

The inexperienced young reporter had done his work well. For several days he had been in the

service of the Aeroplane Company as a common workman in the yards. In that time, with his eyes open and by skillful questioning, he had succeeded in striking up an acquaintance with one of the skilled enginemen working on the new car. From this man he had wormed the general details of the aircraft and learned that a test of the completed aeroplane was to be made.

These things were not told in his story but he did describe graphically and in a way that made Mr. Latimer nod his head in approval, everything to be seen by the eye from the time the great tandem-planed sky vehicle was rolled out into the yard and lifted itself cloudward until it sank in the same spot again twenty-five minutes later.

When those pages of his story reached the desk Mr. Latimer rose and hurried to the busy writer's side.

"How did you know they were going to pull this off to-night?" he asked.

"I did n't. But I guessed it would be at night. I meant to watch each night—"

"Where were you?"

"On the roof."

"You 're doing very well. Good stuff," was his superior's comment. "Get it in a column."

There was n't a great deal that the young re-

porter could write of the actual flight. The ship-like structure had been wheeled out of the gloom of the canvas-sided setting-up room into the yellow glare of half a dozen yard torches. It rumbled heavily—more like a heavy truck than the flimsy airships Stewart had seen. Then, for some minutes, several persons had passed back and forth by means of a step ladder into an inclosed part of the great, metallic-glinting structure. From the lights that flared up and died out in the big torches he knew that his first night's vigil was to be rewarded with something.

“At ten fifteen o'clock,” he described in his story, “only a vast expanse of metal, cables and truss could be seen vaguely as those busy about the towering superstructure moved a torch or climbed into or out of the mammoth enclosed frame. Just before ten twenty o'clock an engine started suddenly somewhere within the shiplike body of the winged wonder. A little later, a brief burst of light within the central enclosure threw into sudden view two rows of flashing portholes. Like the bow of a miniature ocean steamer, the front of the shadowy structure stood, for a moment, clearly defined in the night.

“Halfway up the side of the vessel extended a railing-protected gallery that indicated two

decks. Along the lower of these ran a second gallery. The forward part of the upper deck was plainly a pilot house, from the rounded front of which, through two small heavily glassed openings, shot antennaelike feelers of light into the black factory yard. Behind this section the skeletonlike gallery led astern along what were apparently three more rooms. Passing these, the gallery ascended the rounded side of the giant car and disappeared sternward in the form of a protected path or bridge. The front of the lower deck resembled the dark hold of a freight vessel. In the rear, a door opening from this gallery revealed, through a glare of light, an engine room, now the center of much activity.

“Herein two young men hung over a puzzle of levers, wheels and valves while a third was just climbing into the gallery by means of a drop ladder or landing stage.

“‘What ’s the use of all this illumination?’ called the young man just mounting the machine. ‘Why not send out cards?’ he added, laughing.

“One of the boys in the engine room stuck his head outside, glanced about and chuckled. As he disappeared within again, there was a snap and the lights outlining the air machine turned black. Then came the renewed sound of feet hurrying

back and forth on metal runways; doors opened and closed and, where deck lights had flooded the strange craft, only the thin rays of electric hand torches indicated persons moving about. One of several men on the ground below now made his way up the ladder to the landing stage and by this to the lower deck gallery, where two of the moving lights were suddenly focussed. Words passed in low tones and, in a few moments, the glow of a green-shaded light appeared through the suddenly reopened door of the pilot house.

“Almost at the same time, but from the distant offices of the aeroplane factory, broke out the staccato of a wireless sender in operation. Those on the lower gallery waited in silence until a voice called from the pilot house:

“ ‘All right, Ned; fine and dandy; the operator says *success and speed.*’

“ ‘Good,’ was the quick response. ‘Come on down, Bob; we ’re off.’

“As the light in the pilot cabin winked out, the same voice continued, ‘Good-bye, Mr. Osborne. We ’ll be back in half an hour. Stay by the wireless. We ’ll keep in touch with you every few minutes.’ ‘Good-bye,’ called another voice and then the man who had just mounted the landing ladder made his way quickly to the ground.”

When Stewart's account of the aeroplane test had reached this point, Dick, the copy reader, shuffled the pages of the last "take" like a deck of cards and snorted.

"This is fine," he said, with a despairing look, addressing Mr. Latimer, "but I thought he was goin' to tell something. Here's six hundred words and he has n't got anywhere yet—"

"Let it stand," was Mr. Latimer's snappy order. "It 's good stuff."

"Simultaneously," continued Stewart's story, "the sound of the engine in operation deepened into an almost inaudible note. Then this was doubled as if a second power had been put in operation. A shaded light shone in the engine room and the pilot house door opened and closed. There was the *tap-tap* of swift footsteps on the lower gallery, one of those aboard sprang up the steps to the top gallery and then a light flashed at intervals along the ladderlike runway on the rear truss. Some one was inspecting the shadowy bridge.

"Far in the rear the hurrying figure dropped through what seemed a small manhole in the truss frame. Half within the tapering, spiderlike construction the person appeared to press a button. There was a sharp buzz in the pilot cabin. Then

the figure with the light ran swiftly forward inside the hollow frame of the tail of the airship and disappeared through a self-closing door into the engine cabin.

“Two powerful engines were apparently in full operation. There was the sound of a quick voice in the engine room as if someone were shouting through a tube.

“‘All ready here and astern, Ned,’ could be distinguished. Then, at the resonant single tap of a gong in reply, powerful clutches must have been instantly applied. The aeroplane’s propellers began their wide sweep. Faster and faster they moved, until, as the closed engine room door opened once more and one of the young men passed out onto the gallery, the wide-reaching metal bird suddenly sprang forward. But it was only for a short distance. Within fifty feet, it lifted in the air and, once off the ground, its bow darted skyward like the beak of a frightened bird.

“‘Don’t forget your lights!’ yelled the figure on the gallery as the airship swept upward, ‘and keep the wireless goin’.’ While he was speaking the swift propellers had already carried the car beyond hearing.”

CHAPTER III

THE VETERAN TAKES OFF HIS HAT TO THE CUB

The rest of reporter Stewart's story of the mysterious airship flight, together with his elaborate account of the construction of the aeroplane as it had been described to him, ran much over a column. Old Dick, the copy reader, groaned and even Mr. Latimer began to wonder how he was to get his "beat" into two columns without "killing" Chamber's "talk" with Colonel Grant, Winton's account of the Airship Boys or Glidden's "lead."

The latter Mr. Latimer had already thrown out conditionally but he was determined to use the interview and the account of the earlier adventures of the daring boys. There could be only one solution of the difficulty: he must have more space if he had to choke it out of the night editor. Meanwhile, he began to put some pressure on the wordy reporter.

"It 's good stuff, old man," he said to the perspiring reporter as the latter pounded his typewriter, "but you know this is n't a magazine and other things have happened to-night."

Stewart was only a beginner. As yet he knew only a part of a reporter's trade. He could write but he had n't learned how to tell it in a "stick." The editorial admonition fell on him with little effect. He seemed unable to omit any detail. Page after page came from his machine to tell how for twenty-five minutes the four or five men in the Aeroplane Company yards waited for the return of the flying car.

He told how a movable searchlight was stationed at the landing place and how the watchers then betook themselves to the wireless office of the works. With good judgment he refrained from telling how he concealed himself just without an open window, and one reading his narrative might conclude that the prying reporter was a guest of the watchful group.

Some of the messages from the moving aeroplane he heard and of these he told. Most of them he missed, as his vantage point was somewhat removed. He could tell that the busy wireless operator was in almost constant communication with "Bob" on the airship. But the most important message he did hear, because when it came the excited operator repeated it as if reading a bulletin to anxious thousands.

"*On board Ocean Flyer,*" he read, "*10.24 P. M.*

Estimate forty miles from Newark at sea. Big steamer beneath. Turning. Better time returning. Look out. Bob Russell."

It required but a moment's calculation when he heard this to make Stewart gasp with amazement. At that rate the *Ocean Flyer* was doing one hundred and eighty miles an hour. Not even this speed had been predicted by his talkative fellow workman. And at this rate he knew that the marvelous airship might be expected in the Aeroplane Company yards again by ten forty-five o'clock.

The reporter made his plans at once. He knew that it was both futile and inadvisable, if he was to attempt to score his news "beat," to wait in an attempt to interview either the Airship Boys on the aeroplane or to get more exact particulars from the Aeroplane Company officials. Therefore, making his way out of the yards, he hurried along switch tracks until he was in the vicinity of the street car terminal.

With watch in hand, he waited in the suburban stillness and gloom while he searched the eastern sky. He knew the *Ocean Flyer* carried no outside signal yet he hoped for a possible glimpse of the shaded green pilot or engine room light. More than once he fancied he could hear the pe-

culiar low note of the big craft's engines. And all the time he kept an eye on the vertical shaft of the searchlight at the works, for by this beacon he knew the returning craft must guide itself to a safe landing. But neither sound nor returning light could he detect. When it was exactly a quarter of eleven o'clock he began to regret his attempt to save time and was debating the advisability of returning to the plant. In doubt, he was aware suddenly of a new note in the hum of the mosquitoes and other marsh things about him. Was it mosquitoes or was it the hum of the unseen airship? The sound ceased suddenly. Almost immediately the shaft of the warning searchlight swept earthward and disappeared.

Instinctively the nervous reporter glanced at his watch. It was a few seconds of ten forty-six. A trolley car was just starting. With a gulp of exultation the happy Stewart dashed forward and flipped the car. He knew that the *Ocean Flyer* had made a successful flight and had safely returned. He knew also the distance it had traveled and the time it had taken to do it. His only object was now to call his office by telephone and deliver the story. All these details his rapidly written copy told later, omitting the personal part. When it was complete a column of matter was on Mr. Latimer's desk.

As Stewart noticed the number of his last page and realized how much he had written, he paused aghast. The bigger part of his story was yet to come—all the details of the ingenious creation remained to be written. Frightened by his failure to obey orders he hastened to Mr. Latimer's desk. Here, three tired and nervous men, with the marks of a night's grinding work on their faces and linen—unlit pipes or half consumed, fireless cigars gripped in their set teeth—were gathered in sullen debate.

"There 's two columns of it now and more to come," the night editor was saying decisively. "We can 't give you another inch."

Mr. Latimer saw Stewart approaching.

"How much more of that story is there?" he asked appealingly.

"A column, I think."

The night city editor sighed and the telegraph editor laughed sarcastically.

"Any one who can see three columns in an airship story to-day must have forgotten they 're already back numbers," exclaimed this executive.

"Lift a column of cable rot," suggested the night city editor. "This can 't be cut; it 's a big story and it 's a 'beat'."

"Give him the paper," went on the telegraph editor wearily.

“You ’ll have to get along with two columns,” answered the night editor, “unless you think the paper is elastic or that we ought to have another page.”

Mr. Latimer slapped the desk with the last “take” of Stewart’s copy.

“You fellows don’t know news when you see it. What does the average reader care about English elections and French champagne riots? Every man and boy in the United States is interested in aeroplanes. And this story tells about the final thing in airships. It ’ll be read all over the world to-morrow. It ’s big, I tell you, and worth a page—”

“That ’s what they all say,” sneered the telegraph editor.

“And I ’m goin’ to print it all—every word of it—if I have to take it up to the old man himself.”

“That ’s your cue,” broke in the night editor as he excitedly attempted to relight his dead cigar. “That ’s where you ’ll have to go. You don’t get but two columns from me.”

“It ’s twenty minutes after one o’clock,” remarked a sour voice from the near-by copy reader’s desk. “If there ’s any more of that Newark stuff you ’d better hump it along.”

Without replying, the night city editor tossed

old Dick the last of Stewart's story describing the departure and return of the Airship Boys' newest wonder and then arose with fire in his eyes.

"Give me all you can write up to two fifteen," he snapped to Stewart, "and—" Just then his telephone rang.

"Yes," he answered in a tired voice while the telegraph and night editors yet lingered by his desk. "Nathan? You seem to have taken plenty of time for your supper. Well? Oh, they did. All right. You don't know where they are stopping? Good-bye." Then he arose and glared once more at his nightly enemies—the telegraph and night editors. "Winton," he called sharply to that reporter, who was sitting near by with his feet on a table. "These Airship Boys left Newark on the express just after Stewart. Nathan says they 're in town. Take a flyer through the hotels. Land 'em if possible. Make 'em talk. Phone me if you locate them."

"'S that mean more of this flyin' machine stuff?" grunted the head copy reader.

"It means I 'm attending to my own business," retorted Mr. Latimer, and with no further word or look for his office associates, he walked hurriedly toward the door. As the sailor "goes to

the mast" or to the captain of the ship in a last appeal against unfairness or injustice, Mr. Lattimer was on his way to the "old man" or the managing editor on his customary protest against the machinations of the night editor. Stewart hastened to his typewriter and resumed his tale of the aeroplane.

"The problem of how to build an aeroplane large enough to carry passengers hundreds of miles—possibly across the Atlantic—and at the same time develop speed enough to hold its own against storms, seemed unsolvable until two discoveries were made last winter. Both of these are now well known to scientists and both are unknown as yet to the layman. It was the almost simultaneous discovery of the new metal magnalium (due to the development of the electric converter by the steel works in Chicago) and a final determination of the law of the propeller by Professor Montgomery of California.

"With this new magnalium it is at last possible to make an all-metal car with light but rigid wings or planes. This metal, a magnesium alloy with copper and standard vanadium or chrome steel, at once assumed a new place in metals." (These facts Stewart had secured from a German metallurgical quarterly in the Newark Public Library.)

"Magnalium is not only extremely light but it has a molecular cohesion never before attained. Its peculiar toughness gives it a capacity for being worked slowly that is ideal for aeroplane uses. It turns the edge of the hardest chisel driven against it, yet the same drill, under slow pressure, will cleave it almost as easily as aluminum."

Marking this much of his new story "more," to indicate to the copy readers that more was to come, and heading his next page "Add 1 Description Aeroplane," Stewart rushed the prepared "take" of copy to the city editor's desk and continued:

"It is from this new metal that the car, planes and truss of the *Ocean Flyer* are constructed. The aeroplane is modeled in general after the body and wings of a gull in full flight, insuring, by its peculiar construction, not only the greatest speed, but, by an ingenious adaptation of the same gull's wing, the automatic stability long striven for by aeroplane builders.

"Three sets of follow or tandem planes project, with slight dihedral angles, for from eighty to forty feet on each side of the body of the craft, a wing width never before attained. Yet, in flight, the enormous craft is readily held



IN THE "LOCAL ROOM" OF THE NEW YORK HERALD.

aloft, with all its load, by wings that are no more than seven and one-half feet in chord—from front to trailing edge. Although it will be incomprehensible to many how such small lifting surface can elevate such a heavy structure, this becomes apparent when the airship is seen at rest. The moment the air pressure due to rapid flight is lessened to a certain point by descent or cessation of motion, the narrow wing surfaces automatically spread till they are twenty-one feet from front to back.”

Glidden, the only airship man in the office, who covered all the aviation “stunts,” had long since finished his interview and was now lounging on the desk next to Stewart’s.

“Great!” was his comment, as he read this part of the story page by page. “Some one is strong with the Jules Verne stuff. Go to it, kid.”

The busy Stewart scarcely heard him.

“This was accomplished,” went on the young reporter, shouting for a copy boy and hustling to the desk another section of the story that was destined never to be printed, “in a simple manner. Near the leading edge of each wing is installed one of the new German pressure gauges with small openings just under the dipping edge. These small appliances, of compact construction,

are easily concealed in the depth of the wing. Ordinarily these powerful gauges operate a needle to record pressure. Those used on the planes of the *Ocean Flyer* are made on a heavier scale and operate directly on a spring drum. From these, light cables extend to movable sections of the wings.

“These movable sections of the planes, the first unique feature of the new airship, telescope within and without the standard sections of the wings. By means of the gauge and spring drums they are extended automatically when the machine is not in swift flight. When the craft has made an ascent and attained a speed sufficient to create a vacuum under the dipping or front edge of the planes, the suction or reverse pressure on the gauges allows the drums to reel in the extension surfaces. When in full motion, as these come in, speed is naturally increased and all the extensions are housed securely beneath or over the main section of the wing.”

“How about the wing trusses?” broke in the skeptical Glidden.

“Corrugated rigidity,” replied Stewart promptly, remembering the phrase he had heard applied to the long, untrussed wings.

“The first section or extension,” his story con-

tinued, "running in its grooves, so closely overlaps the outside of the main section as to appear to be its proper covering. The rear section, with separate leaves, like the feathers of a bird's wing, likewise disappears, leaving only the long narrow wing which has always been the ideal speed machine.

"To drive this huge craft, whose body consists of two stories or decks with pilot house, state-rooms, fuel chambers, engine room, bridges above and protective galleries, a much higher percentage of motor power than ever secured before had to be turned into propulsive energy. The waste, or 'slip' of the ordinary propellers not only allowed a great deal of the motor's power to escape, but it applied the remaining power so far from the shaft of the propeller that the resultant leverage greatly reduced the actual thrust." (As Stewart finished this sentence, after several pauses and corrections, he turned the page over to Glidden with some pride. Then he paused while the older reporter read it.)

"Is that right?" asked Stewart with a curious smile.

"Absolutely," answered Glidden. "What 's next?"

Stewart's typewriter began clicking again.

“The new French ‘moon propeller’ does away with this ‘slip’ and allows the full power of the engine to be applied advantageously. Viewed sidewise this new form of propeller looks exactly like the new moon, its tips bending ahead of its shaft attachment. Its object is to gather the air at the outside of the circle,—”

“Periphery,” suggested Glidden, who was reading over the writer’s shoulder. Stewart made the change and continued: “compress it in accelerating degrees as it is forced toward the shaft and there, at the broad, ugly-looking middle section of the blade, exert the full force of the motor on the compressed air. The result is to increase the efficiency of the engine by two hundred and fifty per cent. The massive, eleven-foot propellers, with a section five feet broad at the center, give opportunity for the application of this great force.”

“How about the engine?” exclaimed Glidden as this paragraph was finished. His smile of skepticism was not as marked now.

“This force,” continued the younger man, “is secured by a chemical engine in which dehydrated sulphuric ether and gasoline or either may be used. Since the experiments with sulphuric ether, made last fall, engine makers have watched

the rapid development of this form of engine with the greatest interest. Magnalium cylinders, sustaining the shock of the tremendous explosions as the cylinders revolve past the exploding chamber, have developed a power previously only dreamed of. Each of the two huge engines used on the *Ocean Flyer* is six feet in diameter with four explosion chambers cooled by fans which feed liquid ammonia to the cylinder walls in a spray and then furnish power for its liquefaction again. In form, each engine is a great wheel or turbine on the rim of which is a succession of conical pockets or cylinders. These are presented to the explosion chambers, receive the impact of the explosion and then, running through an expanding groove, allow the charge to continue expanding and applying power till the groove ends in an open slot which instantly cleanses the cylinders or pockets of the burnt gases. By this arrangement there is only a twentieth part of the engine wheel where no power is being imparted, thus giving practically a continuous torque."

"How 's 'torque'?" laughed Stewart as he inserted a fresh sheet of paper in the typewriter.

"Torque," responded Glidden without even a smile, "is exceedingly good. As to the rest of your mechanical details all I can say is I take off

my hat to you and whoever handed you this. It is exceedingly warm."

"The joke of it all," commented the other reporter, who was not without his own sense of humor, "is that these absurdities all happen to be practicalities. There 's a little more."

"Weighing 520 pounds each," continued Stewart, "and with a speed of 1,500 revolutions a minute, these big turbines generate 972 horsepower, natural brake test, and this may be raised to above a thousand horsepower without danger. Revolving in opposite directions they do away with dangerous gyroscopic action. Power is applied to the propellers by magnalium gearing. These are geared up, instead of down, as has always been the practice, and the new 'moon propellers' gain in thrust with high speed instead of losing it. This is because of greater compression of the air and a vacuum set up ahead of the blades by reason of their high speed. The car itself—"

At this moment—now after two o'clock—Mr. Latimer suddenly appeared at Stewart's side.

"Need n't write any more," he said sharply. "The story is n't going to be printed. The managing editor wants to see you at once."

CHAPTER IV

THE AIRSHIP BOYS MAKE THEIR APPEARANCE

To be ordered to the office of the managing editor in this summary manner at half-past two o'clock in the morning was enough to set an older reporter than Buck Stewart guessing—Buck because his given name was Buckingham. Buck's first thought was that he would now be asked to explain why he had persisted in expanding a column story into twice that space. Somewhat to his gratification Mr. Latimer escorted him to the office of the head of the paper.

The young reporter had never even seen his distantly removed superior. He had heard that the august editor looked like a preacher. He knew that the "boss" was one of the greatest journalists in the world. Then, instead of speculating on the cause for his summons, he began to wonder how the "M. E." happened to be in his office at that late hour. The real reason was that the editor had entertained friends at the theatre and lingered long at the supper after. But in Buck's mind, it could only be because the books on "How

to be a Journalist'' all said the real newspaper man is always at the right place in a news crisis.

Without a question to his guide, the young newspaper man deferentially followed Mr. Latimer down the long, half-lit hall, through the ground glass door into the anteroom where, in the day time, a colored Cerebus sat in state, and thence into the not over-large room of the director of the great paper. The managing editor, in evening clothes and a crumpled shirt, was slowly exhaling the smoke of a cigar while he examined a large wall map of America and Europe—tracing with a long, white finger a curved red line that marked some steamer course. On the approach of Mr. Latimer and Stewart, the editor turned, motioned Buck to a chair and seated himself in the one at his own desk. There was no introduction. The night city editor took a leaning position against a big table in silence.

“This is Mr. Stewart, I believe,” the managing editor began with a smile as he leaned forward and nervously tore a strip of paper into bits. The smile rather increased Buck’s alarm. He was sure he was in for nothing but criticism and the smile made him fearful that this was to come in ironical words.

“Yes, sir.”

“You discovered this new aeroplane—wrote the story about it?”

“Mr. Latimer sent me out on it. I tried to write a story but I guess—”

“At least you know all about it?”

“I think so. Yes, sir. There are some things I could n’t learn, but I found out considerable.”

“And it was made by the young men they call the Airship Boys?”

“Yes, sir.”

“Do you think any one else knows what took place to-night?”

“I ’m sure no one does.”

“Or the details of the new airship; the nature of it and what it can do?”

“They seem to be trying to conceal everything. I think no outsiders knew anything about it.”

“And this machine can travel at the rate of one hundred and eighty miles an hour?”

“It did it to-night and kept it up for twenty-five minutes.”

Buck’s questioner leaned back in his chair and gave Mr. Latimer a peculiar look. He seemed about to speak to his assistant but turned toward young Stewart again, took a long, reflective puff on his cigar and continued:

“Have you any reason to believe this machine could cross the Atlantic?”

"I think it could. I believe its makers think so. They call it the '*Ocean Flyer*.' "

What had been a smile on the editor's face turned into straight, set lips. Again he turned to Mr. Latimer.

"These boys are somewhere in the city you say?"

"Newark says so," was the night city editor's prompt response as he slid from the table and took a step toward the desk. "Nathan says they came in from Newark on the midnight express. I 've got a man out after them now."

"Have n't heard from him?"

Mr. Latimer stepped to his superior's desk and took up the telephone.

"See if Winton is back yet," he asked sharply.

"Mr. Winton called a few minutes ago," was the instant response from one of the switchboard operators. "He says them parties is at the Breslin but he ain't seen 'em yet. He wants as you shall call the Breslin what he shall do."

Mr. Latimer turned to the head editor, the telephone yet in his hand:

"Yes, sir; they are at the Breslin. Our man has n't seen them. They 've probably turned him down."

The managing editor thought a moment, in

which interval of silence he relit his cigar and then nodded an approval.

"That 's all," answered the night city editor to the operator, "no message now." And he replaced the receiver. Mr. Latimer's attitude seemed to indicate that he knew something important was about to happen. Buck, himself—only temporarily relieved that the storm had not yet broken on him—also cudgeled his brain to account for his interrogation.

"You 've stopped the story?" continued the managing editor at last.

"Yes, sir," answered Mr. Latimer ruefully, "although most of it is in type. It was a beat."

"I understand," said the editor instantly and in a consoling tone. "Perhaps we can get a bigger beat." He began tearing another bit of paper. Then throwing the pieces suddenly from him, he sat upright, grasped the arms of his chair and said to Latimer:

"I must see these boys to-night—at once if possible. Can you bring them to me? To this office?"

"Certainly," replied the night city editor without a falter or a doubt in his voice. "I 'll go myself."

"Get them if you can; it is important."

Without a question Mr. Latimer hastened doorward. Stewart arose to follow him. The managing editor waved Buck to his seat again.

"I want you to tell me the story you wrote to-night: all you know about this new airship."

Buck now made up his mind that, whatever might be the meaning of the managing editor's sudden interest in his aeroplane story, it was not directed toward him personally either in the way of commendation or criticism. Something had developed the possibility of a bigger "beat," the manager had suggested. As the reporter received the order to tell the whole story he reseated himself. He also had a new thought: "This means something good," he said to himself, "and while I 'm talking I 'm not goin' to forget Buck Stewart. If something is to come out of this I want to be in on it."

Before he could begin his story his chief executive resumed, suddenly:

"These Airship Boys—did you see them?"

"No," replied the reporter. "I was totin' lumber in the yards—"

"You are from the south?" interrupted his listener.

"Kentucky," answered Buck.

"How long have you been with the *Herald*?"

"Six months."

"You are about twenty-one years old?"

"Twenty in the fall."

"How did you get your job?"

"I worked on the Paducah *News-Democrat* until I had money enough to get to New York. Then I came here and asked for work. They put me on."

"Right away?" went on the managing editor with an incredulous smile.

"No, not at once. I think it was after two weeks." Buck became a little embarrassed and shifted his position. "At first the city editor told me there was n't any chance; that he could n't even try me out until I 'd had some city experience. I told him news was news, whether it was in the 'tenderloin' or in Paducah. But he did n't seem to hear me. Then I found out when the city editor came to work and I showed up at the same time each day for two weeks. He was pleasant enough for a few days. Then he began to look bored. At last he used to scowl at me."

"Then what?" laughed the editor softly.

"Well, one day he seemed more out of sorts. He looked as if he had a notion to kick me. Then he groaned and said 'report to Mr. Latimer tonight and keep out of my sight.' I have n't seen him but two or three times since."

The editor seemed to chuckle but Buck could not be sure. Then the manager returned to the Airship Boys after a few moments of silence.

"What do you know about these young men, the Airship Boys?"

"Only what I 've read," was Buck's answer. "They 've been in the papers for several years. They are from Chicago." Then he recalled Winton's assignment—the sketch this reporter had made of the young aviators to be used in the now abandoned story. "There 's a story of them in proof by this time, I think," he added. "Mr. Winton wrote it to use in the morning."

"Get it for me, if you will," said the editor. "And the proof of any other matter on this story that has been set."

In a few minutes Buck was back with a handful of Mr. Latimer's proofs. As he passed through the big local room he noted that it was two thirty-five o'clock. The managing editor was lighting a fresh cigar when he returned and was again on his feet intently examining the big wall map, the principal part of which seemed to be the Atlantic Ocean.

"Ever been abroad, Mr.—Mr.—?" was the editor's rather irrelevant greeting to Buck as he reëntered the room.

"Yes, sir, to England," was the reporter's response. Buck did not bother about reminding the great journalist that his name was Stewart. His questioner, whose head was twisted sideways as if he were trying to make out the printed words or figures on the scores of steamer routes, looked up in surprise. "My grandfather lives in London. I 've been there twice with my mother. When I was fifteen I rode a wheel from Liverpool to London. We spent a summer there."

The managing editor looked Buck over as if making an inventory of him.

"Is your story in proof?" he asked at last as he returned to his desk and picked up some of the proofs.

Buck, standing by the editor's side, began nervously to look over the galley slips. Some were yet damp. The more experienced eyes of the older man detected Winton's story of the Airship Boys. Extracting it from the bundle he passed the other slips back to the reporter and gave his own attention to Winton's "insert."

"The Airship Boys," the story began, "now known everywhere in America, are not unknown in Europe. Ned Napier and Alan Hope, who first attracted attention under this pseudonym, are Chicago products. Robert Russell, who, from

constant association with Napier and Hope, is now generally reckoned as the third of the trio who have gained fame under that title, is the oldest of the three and hails from Kansas City, where for some time he was a reporter on the *Comet*.

“The greatest achievement of Napier, Hope and Russell was the creation, elaboration and institution of a system of aerial navigation which resulted in the present Chicago-New York air line.”

“I see that one of these young men, Russell, is a newspaper man,” commented the editor, lifting his tortoise-shell nose glasses inquiringly.

“Yes, sir,” answered Buck, “and a good one, I guess. Winton knows him. Met him in New York last summer when Russell and Napier and Hope were here floating the New York-Chicago airship line—the Universal Transportation Company. You remember the ‘Flying Cow’ mystery, sir?”

“And these are the youngsters?” exclaimed the editor with new illumination, replacing his glasses and resuming his reading.

“Napier,” Winton’s account continued, “is the son of a Chicago lawyer—now dead—who was an amateur aeronaut. The father became interested in dirigible balloons about four years ago and con-

tracted to make one for an amusement park. The father dying before the completion of the contract, his son Ned assumed it, finished the craft and then undertook to operate the balloon. Through a series of adventures he attracted the public eye and his career began.

“Early in the following year Napier and a chum, Alan Hope—a lad of mathematical turn—were employed by an ex-army officer, Major Baldwin Honeywell, to construct a large balloon—one capable of a five-day flight—for the purpose of locating a hidden Aztec temple in Navajo land in Arizona. In this adventure Robert Russell, then representing the *Kansas City Comet*, joined the boys and when the details of this highly interesting, novel and profitable project reached the public the title of the ‘Airship Boys’ was coined by the newspapers.

“It was in this flight over the mountains and desert that liquefied hydrogen was used for inflation purposes, probably for the first time. Although the big balloon used at this time was left in the mountains it was rescued later by a second expedition organized in the same year. At this time young Napier and Hope encountered one of their most marvelous adventures. While they were attempting to ascend from one of the mesas

of Navajo land, their balloon was caught in an aerial maelstrom, swept westward to the Pacific Ocean and finally wrecked on a water-logged derelict lumber vessel. On this, within ten days, the young aeronauts turned aviators by constructing an aeroplane out of the remnants of the car of their dirigible balloon."

Buck had what proofs he could find of *his* story and stood waiting but the managing editor leaned a little further toward his desk light and continued to read.

"Escaping from the abandoned wreck, the improvised aeroplane made a three hundred mile flight to land and came down in the highlands of Mexico where the daring aviators added further flavor to their novel experiences by rescuing a blind man, long a prisoner among an unknown tribe of Mexican Indians, and preventing his immolation as a human sacrifice on the summit of a prehistoric pyramid."

The absorbed editor paused and, without lowering the slip he was reading, glanced at Buck over the top of his glasses.

"Are you familiar with the story of how these boys made an aeroplane on a wrecked vessel in the Pacific?" he asked.

"Yes, sir," responded Stewart. "It has been

told in the newspapers. There are several books about it and other adventures of these young men."

"I wish," continued the editor, "if you know the titles of them, that you would step into some book shop to-morrow and have all of them sent to me." Then he resumed his reading.

"In the summer of the following year the Airship Boys, including young Russell, the reporter, sailed from San Francisco on a novel Arctic trip. One of the backers of this expedition was Major Honeywell and another was J. W. Osborne, of Boston, a millionaire manufacturer interested in copper mines in North British America. For traveling over the ice a dirigible balloon was carried along. The car of this was a practical aeroplane and ice yacht. This little-heralded dash to the north is said to have reached to within a few miles of the pole. The return was made by way of northern British America where the aeroplane part of the aeronautic outfit was used to discover a marvelous copper mine on an uncharted island in Coronation Gulf.

"Out of their interest in this mine and the profits of their previous flights, the Airship Boys were able to take up the study of scientific aeronautics. This resulted in several marvelous in-

ventions, including the 'rocket' engine of 'Flying Cow' fame and the subsequent organization last summer of the Universal Transportation Company which was underwritten by J. P. Morgan & Co. Little has been heard of the celebrated aviators since then. That they have not been idle the above story attests."

When the managing editor finished the galley proof of this brief account of Ned Napier and his chums, he removed his glasses, lighted his cigar once more, reached out his hand for Buck's story and then laid it on his desk.

"Tell it to me yourself, briefly," was his order.

"If you ever read what I wrote," began Stewart attempting to conceal some chagrin, "the 'lead' is n't mine. I guess it was rotten. Some one rewrote it."

The listener only nodded his head and waited, smoking slowly and swinging his glasses expectantly. Thereupon Buck began and, much better than he had written it, told the story of the new aeroplane: how he had secured work in the plant, ingratiated himself into the confidence of the workmen, used his eyes and ears and finally witnessed the night ascent. In the midst of his rapid narrative the telephone rang. The listening man responded, smiled, replied in approval and then

returned to the graphic narrative. Toward the close of the description the editor arose. As Buck finished, the editor laid a hand on his shoulder in silence. Then, as if recalling the written story, he stepped to his desk, picked up the proof and gave it swift inspection. Without reading it all he turned to the young reporter.

"I don't know what your wages are, my boy," he said kindly, "but whatever they are, they are now doubled. It is probably the last time any of your copy will have to be rewritten. I am glad you are on the *Herald*. Good night." He held out his hand. "Don't think your unprinted story is wasted. I may want to see you to-morrow."

As Buck, his cheeks aflame, shook hands there was the sound of footsteps in the next room.

"Thank you, sir," Buck began. But he found no time to say more. The door was thrown open and Mr. Latimer and three young men entered the office. The sudden invasion threw the retiring reporter into the background. And yet, before he closed the door on himself, he paused a moment to observe the managing editor hastening toward his visitors.

"Mr. Napier, Mr. Hope and Mr. Russell," announced Mr. Latimer in a tone that was not without a little pride.

“Clear the stage for the real stars—the Airship Boys,” said Buck to himself and closing the door, he hurried down the hall.

CHAPTER V

A BEWILDERING PROPOSITION

There was no marked sign of cordiality in Ned Napier, Alan Hope and Bob Russell as chairs were brought from the anteroom and the Airship Boys were asked to seat themselves. It was three o'clock in the morning (the giant presses below were just starting on the big last edition of the paper) and the visitors were yet to be given an explanation of why they had been asked to get out of bed after but two hours asleep, and hurry by taxicab to the office of the *Herald*. Even their brief rest had been broken into by reporter Winton's persistent telephone calls. Not even the just before dawn coolness of the streets had aroused the boys into day-time alertness.

"I am obliged to you, gentlemen," said the managing editor after the conventional salutations. "I would have come to you myself, but the matter in hand is so new to me and so important that I am just now prepared to talk to you intelligently. What I want to discuss with you I had not heard of at one o'clock. I have been studying it ever since. I hope you will pardon me."

Napier—just between boyhood and young manhood—spoke for the visitors. The slight frown on his face relaxed.

“We have no idea what this business can be,” he responded with a smile, “but of course it is no foolish errand. If we seem a little stupid please have patience with us. I ’m hardly awake now.”

“Thank you,” responded the editor. Then he paused while he carefully scanned each member of the party. As if to gain further time in which to frame his ideas into words, he offered his cigar case. Only Bob Russell and Mr. Latimer accepted a cigar. In the interval of lighting these, Ned and Alan adjusted their disheveled clothing. In age, Alan was slightly older than his chum. Russell had just attained his majority. Each boy was typically Western. All were in comfortable light clothing and soft shirts, the former trim and natty enough originally no doubt but now somewhat sagging in the pockets because of note books, pencils, pens and folded papers.

Ned wore a new straw hat, Alan had thrown off a cap, and Bob’s hat, on the table, was a felt, light and soft after the Western style. A fresh spot of oil on Ned’s light coat seemed to annoy him, probably because of the formal and spotless

attire of their host. The main differences between the boys were in their faces. Russell had the imperturbable, frank—even bold stare of the typical reporter, which was only lost when he smiled. Napier's, boyish and yet intense, wore at times the soft look of a dreamer or poet. Hope, always alert and quizzical, had not even smiled as yet. Alan's character was well indicated by Ned's frequent phrase: "the boy wonder who has to be shown."

The managing editor's examination of the three young men did not seem to make his coming explanation any easier. "They were just three boys," he explained later to a friend, "but I knew in a moment they were not 'kids' mentally." While Ned coolly smoothed his hair the editor finally began.

"I may as well be frank as a preliminary. The *Herald* is in full possession of the facts concerning what has taken place this evening." Not a boy batted an eye.

"If you don't mind," said Ned in the pause that followed, "would you be a little more explicit?"

"I mean that a *Herald* reporter watched the *Ocean Flyer* leave the Aeroplane Company's yards to-night and saw it return twenty-five min-

utes later. We are advised that it traveled forty miles seaward and returned safely at a rate of one hundred and eighty miles an hour. We have reasonably full details of the construction of your new airship and, I believe, exact accounts of its unique features—the triple tandem planes, their automatic adjustment, the new ‘moon propellers’ and the enormous turbine sulphuric ether engines.”

There was a silence following this speech that was dramatic. As if schooled for such emergencies not one of the three boys looked at the other. When the silence was broken it was by Ned.

“As you say, your information is reasonably correct.”

Another pause followed.

“I assume,” continued the editor, “that you recognize that these facts make a good newspaper story, particularly when they are known to one paper alone.”

The first response to this came from Bob Russell, the reporter. But it was not spoken. Recrossing his legs, he thrust his hands deep in his coat pockets and gazed determinedly toward the ceiling.

“And I assume,” spoke out Alan Hope at

last, "that you did not call us here to tell us that."

"Incidentally," said the editor at once. "I may add that, despite the excellence of this story as a piece of news, the *Herald* is not going to print it. Here," he added picking up the bundle of proofs from his desk, "are the proofs of nearly three columns of matter telling this story. It is in type and ready for the press. The last edition of the *Herald* is now on the street without a word of it."

The surprise caused by this statement seemed almost as great as that caused by the editor's first speech. Still the cautious boys gave no outward signs of deep concern.

"Perhaps I ought to return your frankness," said Ned at last after it had become doubtful who would speak next. "When we entered your office I suspected just what you have told us. The young man who left it as we came in, I recognized. He is a skillful reporter. We thought we owned our new car and its ideas. At least we paid considerable money to develop them. We also had reasons of our own why the matter was not to be made public. The *Herald* has been clever enough to get our story. I suppose we are helpless."

The managing editor waved his hand as if this sort of irony was an old story to him.

"You don't want the story printed?" he said laconically.

"We do not," replied Ned in the same tone.

"We are *not* printing it."

Ned bowed his head as if to say: "Well, why not?"

"Let me be still franker and ask you: 'Why do you object to the story being printed?'"

"Perhaps," answered Ned, "if I may be equally candid, that is our business."

The editor smiled unmoved.

"Are you not curious as to why I suppressed it? Why I did not see fit to print it?"

Not one of the boys, apparently, had taken this view of the situation. All, at once, felt a little abashed.

"I think I 'll have to ask your pardon. Of course you had a reason."

"Purely selfish," was the quick response of the manager. "Let me ask you one more question. Your secrecy suggests some particular plan or purpose. Do you care to tell me what that is?"

"It is a long-concealed secret," explained Ned after a look at Alan and Bob. "I don't see just why we should talk now!"

The head of the *Herald* nodded as if in entire approval, leaned back in his chair for a moment

and then, much as if it had been under discussion, remarked:

“At the speed you have secured and with the protected car the *Ocean Flyer* carries, why don’t you cross the Atlantic?”

Ned eyed his questioner a moment and then, with a glance at his two chums, broke out laughing.

“And make good our name?” he asked, apparently glad to get into his usual vein of joviality.

“And make good your name,” repealed the editor.

“Perhaps we may,” went on Ned impulsively. “Now that you ’ve betrayed me into that confession, whatever you do with your story of our new machine, I hope you ’ll say nothing of this. That is our object.”

“To reassure you,” answered the editor, “I have only to tell you that I hope your secret will be the *Herald’s*.”

“What do you mean?” broke in Alan.

“You *can* cross the Atlantic, you *ought* to cross the Atlantic and I hope you *will* cross the Atlantic—for the New York *Herald*.”

“For the *Herald*?” exclaimed Bob. “For a prize?”

The editor nodded his head.

“Not for a prize,” he replied soberly, “but on a news assignment—the biggest news ‘beat’ ever pulled off by a newspaper.”

The Airship Boys forgot the irritation of their abrupt summons, the chagrin over their stolen secret and all the languor the late hour had been working on them. With hurried glances at each other they faced the managing editor wonderingly. In the silence a book dropped from the table with a crash. Night city editor Latimer had fallen against it and stood with bulging eyes and mouth agape. Not until that moment did even he suspect the plans of his chief.

“A news assignment?” mumbled Ned finally.

“I don’t know how much thought you have given the possibilities before you,” answered the editor, “but I have thought very hard on the subject for an hour. As I understand it, your metal airship can maintain a speed of one hundred and eighty miles an hour for a protracted period. It is, in a direct great circle course, a little over three thousand miles from this city to London.”

“Which we could cover in seventeen hours,” boasted Alan.

“Precisely,” went on the editor. “In other words, for our purposes, you can cross over in twenty-two hours and come back in twelve hours or less.”

“Twelve hours or less?” exclaimed Mr. Latimer speaking for the first time.

“Certainly, in a way,” laughed Ned. “There is a difference in time you know of five hours coming west. We gain that. We ’d be in the air seventeen hours actual time but by the clock not over twelve hours.”

“For instance,” interpolated the managing editor, “if the *Ocean Flyer* left London at two o’clock in the afternoon and came to New York at the rate of one hundred and eighty miles an hour it would reach this city in seventeen hours. Allowing five hours for the difference in time, instead of reaching here at seven o’clock the next morning it would arrive when our clock hands were pointing to two o’clock.”

“In the same way,” explained Alan, “we would have to add five hours to our clock time going east. That is,” he added edging forward in his enthusiasm, “if we left New York at two o’clock in the afternoon, instead of reaching London seventeen hours later or at seven in the morning, the clocks would be striking noon when we got there. Oh, we ’ve figured all that out many times.”

“That being true,” resumed the managing editor, “and this marvelous annihilation of space

and time being at last a possibility, as I conceive it, I have decided that the *Herald* ought to assist in announcing the fact to the world by giving a practical illustration of what may some day be a commonplace."

"You mean the *Herald* wants to share in the glory of our ocean flight if we make it?" asked Ned, his brows knitted.

"I do," was the response. "You boys have the airship that can do this and I think you have the daring to try it. If you do it with no other purpose than to show that a flight across the Atlantic is a possibility, you will get for it glory and fame—both empty rewards. Coöperate with the *Herald* and I will see that your success brings you not only fame but substantial pecuniary reward. The *Herald* is prepared to pay you, not a *reasonable* sum but an *extravagant* reward."

"What if we are satisfied with fame alone?" asked Ned.

"It will not be less because you act for the *Herald*."

"What is there in it for your paper?" asked practical Alan.

"Let me finish my proposition," continued the editor drawing his chair forward into the half-circle of alert boys. "By the way, the *Ocean*

Flyer is finished and ready for flight at any time, I take it?"

"Practically so," answered Alan guardedly.

"This is Thursday, June 17. One week from to-day King George V will be crowned King of England. It will be a ceremony that will attract attention throughout the civilized and savage world. As a news story, it is an event to test the news-gathering ability of the greatest newspaper. The dramatic repetition, on a modern stage, of feudal forms and priestly rites, may never again be repeated. The *Herald's* best writers are already in London. Our photographers are now there to graphically illustrate the unique picture of royal pomp and power. It is the aim of the *Herald* on this occasion, as on all others, to present a better story, a fresher narrative and more perfect pictures of this event than any other newspaper in the world."

"Not counting the London *Times*?" suggested Bob as the editor paused.

"Not counting the London *Times*!" repeated the great journalist slowly and significantly. "And to-night I have decided that we can do this with the assistance of the Airship Boys and the *Ocean Flyer*." The speaker now showed his first enthusiasm. As he gripped the arms of his chair

he continued with precision. "I want the *Ocean Flyer* to leave London at two o'clock on Coronation Day, June 22, and bring to the *Herald* office in New York the best writers covering the coronation and the photograph films made of the royal procession and such other pictures of the actual coronation as our photographers may secure. I want these men and pictures delivered at the *Herald* office or its vicinity by two o'clock the next morning. If you can and will do this you may name your own price."

It would have been difficult to tell on whom this astounding proposition fell with the greatest surprise: the Airship Boys or Mr. Latimer, the night city editor. The latter's immediate wonder seemed to turn almost at once into an envious admiration for the man who could conceive such a bewildering idea. In this, he was apparently joined by Bob Russell upon whose face there was a frank look of exhilarating amazement. Alan, elated but puzzled, turned slowly to Ned. The latter gazed at the author of the daring conception as if partly hypnotized.

"That is the reason I killed to-night's story," continued the editor in a low voice. "I could not take the chance that another newspaper might attempt to do the same thing. Only those in this

room know what is possible. We can make this effort in secret. What you planned to do you *will* do. What I propose will only add to the glory of your success."

"It is not easy to give you an answer," almost whispered Ned at last as he wetted his lips. "It upsets all our plans and we have had no time to consider it."

"Do you want time for that?"

"It 's a tremendous thing to decide in a few minutes."

"Is it the amount of compensâtion?" asked the elder man.

"I think that will not decide us."

"What is it that makes you hesitate?"

"I hardly know. Alan," said Ned turning to his chum, "you have n't said anything."

But Alan made no reply. Gazing at the floor, he sat as if lost in thought.

"You could carry these men; two writers and a photographer?" asked the editor.

"Oh, there 'd be no trouble about that; that many and enough persons to operate the car. I think we could even give the photographer a dark room," answered Ned. "What do you say, Bob?"

"I 'm on from the start, if you put it up to

me," exclaimed Russell who had now wholly recovered his equanimity. "We could do it without turning a hair."

Every one smiled, while Ned drew his chair closer to Alan's.

"Let me add another detail," resumed the editor. "On the day before the coronation the evening edition of the *Herald* will print a special coronation edition—American tributes to the King and Queen. Two sets of the stereotype matrices of this edition will be made at two o'clock that day. These are paper and light, as you know. On your eastern flight you will carry these to the office of a London paper and deliver them at noon of Coronation Day. With the London evening papers we will issue the complete New York *Telegram* of the day before."

The listening, newly excited boys all arose and stood together. Mr. Latimer walked to the window and raised the shade. The soft gray light of a June dawn flooded the room and paled the yellow electric lights. It was four o'clock. A sleepless night had left its traces on all. The managing editor was again tearing a paper strip into bits. The night city editor turned out the light bulbs and, biting at his short mustache, walked nervously back and forth. Suddenly the

editor brushed the torn paper from his lap, arose and went to the big wall map. The three boys followed him.

"We had planned to start from St. John's in Newfoundland," Ned began in a tired voice. "The distance from that point to Fastnet Light or Cape Clear in Ireland is less than seventeen hundred miles. That was our plan. It seemed to us to be a big thing to undertake."

The editor did not argue. Turning to the map, his form straightened. A smile of assurance seemed to blot out the traces of night. With a sweep of his arm he described a wide curve from New York to London. His smile deepened. Dropping his other hand on Ned's shoulder he exclaimed:

"There is your real course. You are next to one of the greatest achievements ever accomplished by man. Do it or attempt it in good faith and the *Herald* stands ready to pay you \$50,000."

The figures were staggering but the three boys were now almost beyond fresh sensations. While no one spoke, Mr. Latimer threw up a window. A wave of cool, fresh air that burst into the room seemed to arouse the bewildered boys more than the editor's last words. It was day and time for clearer thought. As the hesitating boys turned

to drink in the refreshing air, on a sudden all was decided. The telepathy of boy comradeship passed the message without spoken words.

“We don’t want the money unless we do what you ask,” said Ned turning to face the managing editor, “but we ’ll try to do it.”

“Thank you, gentlemen,” exclaimed the worn editor. “Say that we meet at the Knickerbocker at one o’clock for luncheon and then to business. Good night.”

As the three boys took their departure the editor seated himself at his desk again and reached for a pad of cable blanks.

CHAPTER VI

AN OLD HOME AND A MODERN BUSINESS

The full significance of this unique proposition did not appear to the Airship Boys until they had cleared their brains with several hours of sleep. In the preceding few days, as the *Ocean Flyer* came to completion, the three boys had put in long hours at the aeroplane factory. And the final test—the flight in the dark to sea and back—had been a strain that left them exhausted and ready for rest. Losing this by being aroused from bed at two o'clock, put them in a nervous and easily irritated condition. There was little time given that night to a consideration of what was to come.

This was not true of the man who had suggested the daring venture. Long after the boys had left him and while they were soundly asleep in their near-by hotel, he remained at his desk elaborating his plans and taking further steps towards their early execution. Long cablegrams in cipher accumulated on his desk. These were to the London office and mainly devoted to in-

structions and injunctions to the men already in the field and at work on the coronation program.

Many of his messages asked questions necessary to an intelligent cooperation between the aviators and the London representatives. Not the least important was the one asking for a description of the best landing place and an account of land marks and signals by which this might be easily discerned. Motor cars were to be in readiness to carry the matrices of the special edition to Fleet street, special police permits were to be secured and arrangements made for the printing and circulation of the transported paper in London.

At ten thirty o'clock the next morning Ned was taking his bath. Remembering their luncheon engagement with the managing editor of the *Herald* he looked over his unpressed clothing with a smile. The oil spot on his coat seemed even bigger than it had the night before. The fact was the boys had come to New York unexpectedly and had meant to return to Newark on the noon train. The new aeroplane having demonstrated the complete success of their latest ideas it had seemed right to report their experience to Major Baldwin Honeywell, the treasurer of the Universal Transportation Company and their closest adviser.

"We 'll have to get a move on us to see Major Honeywell before noon," exclaimed Alan who soon joined his chum. "What do you suppose he 'll say about it?"

"What do you say yourself?" asked Ned as he manipulated the big bath towel. "It comes to me like a dream."

"I 'm afraid we did n't give it enough consideration," answered the other boy. "I 'm not so warm in my feet on the subject to-day."

"That 's all right," panted Ned. "You 'll work into it. I think we did the right thing. We meant to try to do it anyway. Why not have an object?"

"And \$50,000," added Alan.

"That 'll help some," replied Ned. "Advertising must really pay," he continued, "when a newspaper gives up that much money just to make the world talk about it."

"How can a paper afford it?" mused Alan. "It could transmit by cable all the copy those men can write coming over; and cheaper and quicker too."

"But the pictures!" suggested Ned. "That 's what it 's really for. That 's the big thing. They 'll stand out like the first telephone or the first electric light. I reckon the stuff the *Herald*

reporters write on the *Flyer* may seem fresher and better but you can bet the pictures are what the paper is after. They 'll beat the other papers by six days. You know what that means."

"What 's what mean?" sang out Russell, flouncing into the room. "Mornin', gents. Hustle along. I 'm starved."

He was told what Ned had been discussing.

"It means that the publication of those pictures the next morning—pictures made at noon one day in London, printed the next morning in New York—will put a crimp in every other sheet in New York. Those are the things that give a newspaper a place in history. It 's the way one newspaper gets to be known above another," volunteered Bob.

"How about us gettin' a little place in history?" asked Ned as he got into his clothes. He held up his rumpled trousers. "We may get a place in history," he went on laughing, "but it won't be in the 'History of Fashions.' We 're a fine bunch to be dining at the Knickerbocker in these togs."

"Don't you bother about your clothes," broke in Alan. "We 're not parading to-day. All you need worry about is that \$50,000 contract."

"And breakfast," added Bob. "A little coffee

and a cool cantaloupe 'll set you up. By the way," he added with a new laugh, "you can get a new outfit in London—some o' those swell Piccadilly rags."

"I suppose you know how long we are to be in London?" interposed Alan. "An hour or less."

"That 's all right," persisted Bob, "buy 'em ready made. If they don't fit that 'll be one proof we 've been to England."

"Well," exclaimed Ned with another look of disgust at his grease-spotted coat, "I 'm ready. Now for some breakfast. Then we 'll hurry over and have a talk with the Major. After that, we 'll meet our new friend at the Knickerbocker. Meanwhile, get your heads working. There are a lot of details to be arranged—if the *Herald* don't change its mind—and we 've got just six days in which to get things ready."

Seated in the Breslin Hotel restaurant—the busy Broadway throng passing just outside the window—while melons, cereals and ham and eggs fell before the attacks of the three boys—each individual head began "working."

"First and most important," began Alan, "excepting the details of the contract of course, we 've got to decide how we are to get away with those matrices; that is, how are we to pick 'em

up without losing the time to send 'em over to Jersey or out to the suburbs? We certainly can 't make a landing at the *Herald* office in the city. And if we can 't do that in New York we can 't do it in London. Where do we land in London within a few minutes motor run of Fleet Street?"

"And we 've got to have a fourth man," added Bob. "Are we going to select him or will the *Herald* want to send one of their own men?"

"Those things 'll work out," exclaimed Ned. "But they 'll have to *be* worked out and we have n't any time to waste. I think we ought to invite the *Herald* man out to see the machine. He 'll certainly want to meet some of the business men we know."

"Let 's bring Major Honeywell to luncheon with us. He expects to go over to Newark with us to-day. Then we 'll get a big car and motor out early in the afternoon. With that off our minds we can get down to business," suggested Alan.

"Say," exclaimed Bob, "I don't see any need to bother about picking up that bundle of matrices. That 's easy." To the looks of inquiry he responded, "You know the postal crane that young Roy Osborne planned for use on ocean steamers? Well, the model is finished. He fig-

ures on installing it on liners so that passing ocean aeroplanes can swoop alongside, toss off the latest London or New York papers with the mail bag, and pick up the ship's mail as the express trains do on land."

"That 'll be all right when the time comes," laughed Alan, "but I don't know any liner that needs to spend money now on such an equipment. It 's a little previous is n't it?"

"Just in time," exclaimed Bob. "We need it now. At two o'clock when these sheets are ready, they can be tossed into a fast motor, whirled to the Battery, thrown on the *Herald* motor boat, rushed out into the sound and delivered to our ocean tug in fifteen or twenty minutes, maybe less."

"And then?" asked Ned.

"And then?" repeated Bob contemptuously. "Why, there is Osborne's postal crane rigged up on the tug and waitin' for our 'pick up arm.' "

"Simplest thing in the world," Ned chuckled. "Great! Check off that problem."

"And meanwhile the *Flyer* loses twenty minutes soaring around over the bay," suggested Alan. "You ought to allow for that in the contract."

"Lose nothing," went on Bob. "We won't lose

a second. We can come from Newark to the Sound in eight or nine minutes. We 'll be all set and ready to start at two o'clock. When the matrix bundle is hustled into the automobile, the *Herald* will notify us—"

"Wireless!" suggested Ned.

"Sure," exclaimed Bob. "Ten minutes after the auto leaves *Herald Square*, they 'll give us the signal by wireless. Then we 're off. Eight minutes later, we ought to grab the bag off the tug and drop our 'good-bye.' "

"How about London?" asked Alan.

"I pass that up," replied Bob. "What I don't know about London is a whole lot. That 's up to some wiser head than mine."

"That suggests something," said Ned after a period of thinking. "We 've generally planned to make Roy Osborne our companion and fourth operator."

"He 's the best young man at the works," Alan condescended to admit.

"But," went on Ned shaking his head, "I can now see that our other man ought to be an Englishman or at least some one who knows London inside and out. Remember, we never planned flying into London. Now, we 've got to do that and go as far as we can toward the center of the

city. Maps and charts won't help much if we are going high or at anything like full speed."

"We 've got six days to find an Englishman," argued Alan.

"And even if we have one who puts us just where we ought to go it 's a cinch we 'll be pinched," suggested Bob. "I reckon they 'd do just that thing here in New York if we tried to use Central Park as an aviation field."

"That 'll be up to the *Herald*," announced Ned, "and we 'll have to talk it over. I have an idea that the newspaper can arrange for some special permit. If it can 't there 'll have to be some figuring."

"We can 't chance that," urged Alan. "There 'll be trouble enough without fighting the London police. Two or three hours conversation in some police station would upset everything."

"Well," announced Ned as he paid the check—he was usually the banker for the three boys—"we can 't settle anything sitting here. Let 's hurry down to the office."

Calling a taxicab, the trio hastened down Broadway to Fifth Avenue and south on that street to an old fashioned brick residence yet standing almost within the shadow of the Flatiron building. There was nothing on the windows to in-

dicating the nature of the business of the house. Hurrying inside, the boys paused for a few moments in a large room at the right, the front windows of which looked out on the avenue. They were apparently familiar with the place, the contents of which no longer left a doubt as to the kind of business transacted in the house.

Framed photographs, wash-drawings and scale plans of aeroplanes hung on all walls. On the old-fashioned marble mantle was a confusion of odds and ends: samples of balloon cloth, rubberized silk, gossamerlike aeroplane covering; thin bars and blocks of steel; a bundle of strips of wood that had apparently been scientifically tested. Above these, tacked to the wall, was a small white flag or burgee on which, in faded red, appeared the word "Cibola." This was the flag carried on the first aerial craft made by Ned and Alan, the dirigible balloon with which the Aztec temple was discovered on the hidden mesa in Navajo land.

On one side of the room two desks, their tops down and locked and covered with dust, bore end plates marked "Mr. Napier" and "Mr. Hope." On the other side of the room was a flat desk. The top was a special map of the United States, Canada and Mexico covered with a sheet of bev-

eled glass the exact size of the desk. On an adjoining small desk stood a covered typewriter. While Ned and Alan opened their desks, Bob left the room and made a tour of three rooms in the rear. In the two middle rooms a half dozen elderly and sedate men were busy on books. All showed deference to Bob above his years. But, beyond shaking hands as if he had been some days absent, there was little conversation.

In a rear room it was different. A square shouldered man was in charge. Between the windows was a breast-high, glass-encased, recording instrument ticking off the seconds of Washington Naval Observatory time. Over this, the second hand of a large clock jerked forward monotonously. At one side, on a table, reposed several compasses. On two desks were small engineering instruments, books, nautical almanacs and drawing tools.

“Well, Lieutenant,” exclaimed Bob, “how ’s the ‘old calculator’?”

“Oh, the major seems to get a new idea each day,” responded the man, shaking hands. “How ’s the *Flyer*?”

The details of the previous night’s test were described.

“I suppose you boys will be back now on com-

moner things for a while. Pretty lonesome here. I have n't seen one of you in ten days."

"You worked out that great circle from St. Johns, Newfoundland, to Cape Clear in Ireland, I suppose?" went on Bob throwing a leg over a desk. When the man nodded, the boy added, "Well, that 's all changed. We 're goin' to start from Newark and head straight for London. You 'll get a request to route us on that line."

"It won't make much difference," answered the calculator as he opened a portfolio and selected an outline sheet covering the Atlantic ocean. "As I remember it, a great circle course connecting Fastnet Light off Cape Clear and St. John's harbor, if you continue it west, will pass just south of New York harbor."

"Then St. Johns would n't be much out of our way?"

"Almost on your path."

"There 's a new deal on," explained Bob. "Get busy and project the new course. And you might as well get down to all deviations; we 'll be goin' in a few days."

When Bob came back down the hall both Ned and Alan were busy at their desks, in which all sorts of mail had accumulated.

"Hey," called Ned as Bob passed the door on

his way upstairs. "Here 's an idea. There is n't one of us really fit to go up there and have luncheon with the *Herald* man. Let 's ask him down here. This is the place to talk it over; we 'll cut out the eatin'."

"It may happen to be just our host's time for eatin'," laughed Bob.

"I 'll chance it," answered Ned, "on the theory that newspaper men can always go without food. If I can catch him, I 'll try to call it off and have him come down here."

A little later all three boys met in a sunny front room on the second floor, the comfortable office of Major Baldwin Honeywell, treasurer of the Universal Company. The white haired, military looking, elder man tried to absorb and digest three lines of talk; the result of the previous evening's experiment, the prospects of the new airship; matters in abeyance in relation to the Universal Transportation Company; the experience in the *Herald* office, the unique proposal, its acceptance and the coming contract.

"We were goin' to carry you up to the Knickerbocker," explained Ned. "Now our man is comin' here at one o'clock. It 's up to you, Major, to see that every thing is all right."

Again Bob was off and up on the third floor.

One following him would have known at once that in the back room that overlooked a grass plot in the rear, telegraph instruments were busy. A chief operator and two assistants were recording reports. One of the assistants sat at a wireless desk.

“Get the works at Newark,” exclaimed Bob with a good-natured salutation for all. “I want to hold some conversation with Tom.” A moment later he was busy with the key of the wireless.

CHAPTER VII

NED NAPIER ADVANCES SOME THEORIES

Neither J. W. Osborne, president of the Universal Transportation Company, nor Major Baldwin Honeywell, its treasurer, had any financial interest in the new airship. This had been planned and manufactured under the supervision of and paid for by young Napier, Hope and Russell. The cost, approximately \$25,000, did not include any pay for the services or ideas of the projectors.

After a trial of the novel airship it was understood that the machine was to be sold to the Aerial Utilities Company in which the Airship Boys and the underwriter of the Universal Transportation Company were the sole stockholders. In the few minutes that Ned and Alan were together in their office on the first floor they decided that the sale of the new *Ocean Flyer* to the Aerial Utilities Company should not be consummated until the transatlantic flight had been made.

In the progress of their hasty talk, however, Ned managed to read several personal letters.

One, in a feminine hand and postmarked Chicago, he did not throw back on the desk for his files. This one he carefully put in his pocket. It was signed by Alan's sister, Mary Hope.

"Your letter is here," it read, "but I do not share in your enthusiasm over the near completion of the new aeroplane. We are not happy to know that Alan and you are to risk your lives again in a new experiment. While you do not say so, Alan has written to father that it is your intention to make a long water flight in the *Ocean Flyer* if it proves a success. I know what that means. I remember the speech you made at your birthday party last summer about crossing the Atlantic! Don't you think that you and my brother have enough fame and reward to stop these risks? I suppose it is presumption for me to attempt to interfere in any way with what you and Alan look on as your 'profession,' but don't you believe your families ought to receive some consideration? And I'm sure it would make us all very happy to hear that you are not going to try to cross the ocean in an airship even if you did make the machine yourself. Please send me word that you are not going to do it."

Ned neither showed the letter to Alan nor referred to it. In fact, he had recently reached a

point in his acquaintance with Mary Hope that did not inspire conversation in relation to her—least of all with his chum, her brother. When the three boys met in Major Honeywell's office a busy hour followed. There was not only much talk concerning the new airship but the temporarily postponed business of the Universal Transportation Company demanded consideration. When the matter of the *Herald* project came up for analysis Major Honeywell and the boys discussed it in all its phases.

When the *Herald* manager arrived, a little after noon, the visitor was first escorted through the various offices. Although he was acquainted in general with the importance and magnitude of this newly organized company, the details of its operating machinery astounded the journalist. For some time after the *Herald* manager reached Major Honeywell's office, he insisted on additional information on this astounding aeroplane transportation service. The route maps, latitude and longitude tables for all cities, magnetic variation and compass deviation tables for aviators, photographs of the newly completed metal monoplanes and the air-line hangars on the 750 mile route to Chicago almost drove the proposed ocean flight out of the newspaper man's mind.

"At least," he said, "what you 've shown, proves to me that we can 't fail in what we 're about to attempt. I 'm mighty glad I missed my luncheon. I 'll not be satisfied now till I 've seen your latest aeroplane."

"This afternoon!" responded Ned with enthusiasm. "Mr. Russell has just been in wireless communication with the factory. Daylight did n't show a scratch on the *Ocean Flyer*. We 'd like to have you and Major Honeywell go out with us this afternoon."

"Delighted," responded the managing editor. "We 'll pick up a bite on the way. And as that is to be pleasure, let 's get down to business. Of course you 'll want a contract."

"Only a memorandum," answered Ned. "Not so much a *contract* as a record of what we are to undertake."

Thereupon Ned reviewed the talk he and his friends had had at breakfast, the journalist making brief notes. The plan for picking up the matrices at the start was received with enthusiastic approval. The boys were to deliver the Osborne postal crane to a sea tug to be furnished by the *Herald*, which was to install the device under young Osborne's supervision. The question of a landing in London was a harder nut to crack. On

this there was prolonged debate. The boys felt forced to put the arrangement of this up to the newspaper.

"I have had but one idea on that," explained the manager. "It may not be wholly feasible but it is all I have in mind. Hyde Park is the biggest open place near the 'city.' It is only about two miles from Fleet Street or 'newspaper row.' There is plenty of room in this park to make a landing and a new start just north of the Serpentine—that 's a long, irregular bit of water you know."

"Will the police permit it?" asked Alan.

"They can 't prevent the landing," laughed Bob, "but we may all be in the police station when it 's time to start back.

"I 'll have to undertake to arrange that," volunteered the manager. "Our men in London ought to have enough influence to get a special permit."

"That 's a point that 'll have to be covered in the contract or memorandum," suggested Major Honeywell. "The boys being strangers to London can not undertake to guarantee this privilege to themselves. If detained by some power beyond their control, the project might fail through no fault of theirs. This contingency should be anticipated."

"I concede that," said the *Herald* representative. "And yet, naturally, an accident of that kind would defeat the main purpose of the project. We might be paying our money for a practical failure."

"Why not arrange a sliding scale of compensation?" suggested Major Honeywell.

"Don't misunderstand me," continued the editor smiling. "The mere crossing of the Atlantic on a mission for the *Herald* is valuable advertising. But, since so much depends on the time of the return trip, I 'd like to make an extra incentive, if possible, for its exact fulfillment."

"In other words," exclaimed Ned, "you feel that part of the responsibility of successfully getting away on the return trip ought to be on us."

"Perhaps that is the plain way of putting it," announced the editor.

"I don't know but what that 's fair," responded Ned. "It 'll make us stir our stumps at least. Let 's make it a sliding scale."

"On that basis," said the journalist quickly, "I 'll make a better offer than I submitted last night—I 'll add \$10,000 if the scale covers both the east and west voyages. What do you suggest?"

Major Honeywell was already figuring. In a

few moments he read the following: "For picking up *Telegram* matrices from *Herald* sea tug on East River between 2 P. M. and 2:20 P. M. Thursday, June 21, and carrying them by aeroplane for the *Herald* directly to European soil within not more than eighteen hours, the sum of \$25,000; for delivering the same, within the same period, in England, \$10,000 in addition; for delivering the same within the same period into the hands of the *Herald* representatives in Hyde Park, London, \$5,000 in addition. For conveying from London, between the hours of 1:30 P. M. (London time) June 22 and 2 A. M. (New York time) June 23, three representatives of the *Herald* and delivering the same within ten miles of the *Herald* office, the further sum of \$25,000. In case of a failure to carry out the conditions of the last clause, the party of the second part is to receive a bonus of \$5,000 if the representatives of the *Herald* are delivered on American soil within twenty-four hours."

"In other words," explained Major Honeywell, "if the *Ocean Flyer*, carrying your matrices, reaches any European point within eighteen hours, the boys get twenty-five thousand dollars. If they reach London successfully they are to be paid ten thousand dollars more or

thirty-five thousand dollars. If they make the trip back in the same time, carrying your three people, they get another twenty-five thousand dollars or sixty thousand dollars altogether."

"That is the idea."

"And if they fail to get back on time they get only five thousand dollars for the return trip."

"I 'll do better than that," added the editor. "I have with me our cashier's check for \$10,000 payable to the Airship Boys. The above terms are agreeable to me. If they are satisfactory to the young men, I 'll pay over the check now, unconditionally. It will have been earned if a start is made in good faith."

Ned at once waved the check aside.

"We 'll sign the contract and we 'll start not only in good faith but in good hope. But we 'll call for our money on the morning of June 23, and," he added, his eyes twinkling, "when you may as well have a check for sixty thousand dollars ready. We 'll earn it."

While Major Honeywell's secretary prepared a duplicate copy of the memorandum contract Alan raised another point:

"Has any one figured where and how we are to deliver your reporters, their copy, the photographer and his pictures? Remember, it will be about two o'clock in the morning."

"Can 't you drop the manuscript and the pictures somewhere out in the bay near the *Herald* boat if it shows prearranged signals?" asked the editor.

"Why not show the same signals on the *Herald* building?" asked Bob. "Our customary green diamond?"

"But we can 't drop the reporters," laughed Ned.

"If you can land our stories and our pictures on the *Herald* roof," exclaimed the editor with new interest, "you may dump the reporters in the Jersey flats and let 'em swim."

"We 'll come over and look at the roof," exclaimed Ned smiling. "The men can take a chance with us."

"Now," began the editor in a new tone, "with these business details out of the way, I want to ask something. I wish you 'd explain to me how you are going to travel one hundred and eighty miles an hour."

"To confess the truth," answered Ned promptly, "it 'll be two hundred miles an hour. One hundred and eighty is our minimum."

The editor's face wore a puzzled look.

"This rate of two hundred miles an hour," explained Ned, "involves no new ideas. That is the

natural evolution from the sixty mile an hour rate due to a better built machine and more powerful engines. All aeroplanes will reach that speed in time just as railway trains go faster with more powerful engines, heavier road beds, better tracks and more daring engineers. But the *Ocean Flyer* has possibilities far beyond two hundred miles an hour—theoretically at least.”

“More than two hundred miles an hour?” gasped the journalist.

“Mathematically,” answered Ned. “I can hardly say how near practice will coincide with theory.”

“And how fast mathematically?” asked the *Herald* manager quizzically.

“Anything up to eight hundred miles an hour. Possibly one thousand.”

Even Major Honeywell started with astonishment. The newspaper man shook his head.

“Beyond sixty miles an hour,” he replied in a puzzled tone, “speed does n’t mean much to me. I can ’t realize what it means to travel one thousand miles an hour.”

“Here ’s an illustration,” volunteered Alan. “At one thousand miles an hour, an aeroplane could circumnavigate the globe, in the latitude of Paris, in seventeen hours.”

“And beat the sun?” exclaimed the newspaper man.

“Mathematically,” repeated Ned, his smile broadening.

“I don’t believe you could travel at the rate of two hundred miles an hour and live,” argued the editor.

“O yes you can,” retorted Alan. “How do you suppose birds cross the ocean without food or water? Don’t you know that there are birds that migrate the length of the Pacific ocean? There are Arctic birds that winter in the tropics and fly to the polar regions in the summer—birds that are never seen on land between those zones.” The newspaper manager and the major were listening intently. “German scholars have discovered that many migrating birds fly at such a high altitude that they can be seen only by means of a powerful telescope. The flight of some of these birds has been measured. Four miles a minute or two hundred and forty miles an hour is not uncommon.”

The surprised manager made no comment.

“The mathematical possibilities of airship speed,” resumed Ned, “are based on height or altitude. The maximum of speed at or near sea level is no indication of what may be accomplished

miles in the air. Let me explain. Say we have an airship such as the *Ocean Flyer* that can fly two hundred miles an hour near sea level where the air pressure is greatest."

"Yes."

"Then imagine the same airship seven miles in the air."

"You 'd freeze. Or if you did n't you 'd die from lack of oxygen."

"Balloonists have gone that high. They were cold enough but they carried oxygen with them and did n't die."

"Well!"

"At seven miles in the air the air pressure is reduced one half. The forward speed of your airship, assuming that it is flying on the same angle, ought to be doubled. You'd be advancing at the rate of four hundred miles an hour."

"I thought the buoyancy decreased with the pressure," broke in Major Honeywell who had absorbed more or less of the terms of aeronautics.

"So it does," explained Ned, "but the buoyancy of an aeroplane is due wholly to its rapid flight. If we are going at the rate of two hundred miles an hour and are then able to double this, we have compensation for the loss of half our buoyancy. So, all other things being equal,

we have a theory that like a migrating bird, the higher we ascend, the faster our flight. And, one other thing. The faster you rise from the earth the less the force of gravity. At eight miles altitude, where the air pressure is one fourth that at the sea level, and where, mathematically," he looked at the astonished editor mischievously, "the two hundred mile an hour aeroplane would be traveling at the rate of eight hundred miles an hour, it has already been calculated that the specific gravity of the airship would be two per cent less than at sea level. Do you understand what that means?"

"That the force of gravity would be less," answered the editor.

"And that the centrifugal tendency would be greater," continued Ned. "In other words there would be an appreciable inclination of the airship to fly away from the earth."

"Oh, I see," exclaimed the journalist. "We have at last come around to Jules Verne's cannon ball that was fired at the moon."

"Only that in this instance," replied Ned soberly, "we have a guidable, continuously propelled cannon ball."

"Did n't an aeroplane man go up eleven thousand feet?" queried the *Herald* manager suddenly. "Did he fly faster?"

“On the contrary,” explained Ned, “he had great trouble in maintaining his position and in controlling his machine. But that was n’t because the mathematics of it was wrong,” and again he laughed. “All other conditions changing at that enormous height, your mechanical appliances must also change. Propellers made alone for the heavy air of the lower altitudes are not adapted to use in the rarefied atmosphere seven or eight miles up. The *Ocean Flyer* has propellers that compress the thin air of the upper levels. Gasoline engines doing their best work when ordinary air is used in the explosion chambers are far less efficient when air at one-half or one-fourth pressure is used. The *Ocean Flyer* has an arrangement for compressing air. Its liberated, exploded gas expands even better in thin air. Present-day aeroplanes and their engines and propellers are made for sea level work. Hoxie, who did that eleven thousand elevation feat skyward had no excuse for such a flight.”

“And you think you can live at that altitude?”

“We ’ll carry oxygen, of course,” went on Ned, “but we won’t even need that. The *Ocean Flyer* has the first enclosed car or cabin used on an aeroplane. The compartments of its two decks connect with each other but all can be made one air-

tight whole. Even the engines are within an airtight compartment. Attached to the point or bow of the car is a large, metal funnel with a wide flange. Tubes leading from the small end of this pass into each room. Flying at sixty miles an hour causes the air to rush into this funnel with such force that all or any one of the compartments are soon full of compressed air. At a speed of two hundred miles this would be so great that, instead of having too little air, we would have too much unless the pressure gauges were watched and the flow shut off from time to time."

The great editor looked on the young aviator as if the latter possessed some of the mysterious power of a wizard.

"That does seem reasonable," was his comment at last.

"At least *mathematically*," went on Ned with the same smile. "This will not only give us breathing air but the pressure ought to give us sufficient heat to prevent frost bite. It will certainly do another thing. If we are driven to use our engine at such a height, we can draw the air for mixing with its gas directly from the engine room where it can be regulated to sea level pressure."

"Major," suddenly exclaimed the puzzled and

not unexcited editor, "send me those contracts when they are ready. I 'm going over to Newark and have a look at this *Ocean Flyer*. I think I 've made the best bargain of my business life."

CHAPTER VIII

THE *Ocean Flyer* CREW IS COMPLETED

Before the arrival of the big automobile, Ned and Alan had a conference with the man in the rear room on the first floor. In all their aeronautical experience, one constant annoyance had been their inability to estimate exactly the speed at which they were traveling. Advancing either with or against the wind—which is always in motion a few hundred feet above the ground—they always had to take the readings of the anemometer with allowances. With the airship speeding into the wind, the pressure set up by the aeroplane itself was increased by the force of the encountered wind. The flight of a balloon directly upward is accurately determined by the barometer. But the drift of a dirigible is largely a matter of judgment or deduction from the anemometer readings.

Because of this the boys had been utilizing the reserve monoplanes of the Universal Transportation Company and some of the lighter, standard aeroplanes of the manufacturing company, to

make experiments in flight speed and how to determine this speed with exactness. Alan, the mathematician of the young partners, had made deductions based on their accumulated data and these he had recently submitted to the engineering department of the company. In the light of the new project this phase of their work had an added importance.

At times, when there was no appreciable breeze (and the boys were always on the lookout for these infrequent occasions) quick flights had been made and the speed of the aeroplane in relation to propeller revolutions had been exactly timed by land marks. Records were also made of the anemometer register on these trips, the latter giving, in the absence of wind, the real pressure on the instrument due to the rush of the aeroplane through the air. At other times, flights were made in the wind, both with and against it. The movement of the atmosphere was carefully measured before these flights and from these figures, compared with the wind gauge readings recorded when the aeroplane was under power—at all speeds of the propeller—tables were made of pressure due wholly to the wind and that caused by the flight of the air craft. Different forms of propellers were used and out of this mass of sta-

tistics the engineer of the company and Alan had worked out formulas for speed computation.

"We 've got to know the wind, Lieutenant," exclaimed Alan as the boys looked over the engineer's neatly recorded calculations. "If we don't know and can 't measure that, we 're as helpless as the old sea dog who navigates 'by guess and by God.' We may guess right on its velocity when we start a flight, but in a little while the whizzing sound dulls your sense of speed. You may make a bad mistake in rising or 'banking' and you won't know where you are—especially at sea."

"'Bird sense' is all right for race track stunts," added Ned, "but it won't do when you 're out of sight of land. We 've got to have something that is automatic; something, at least, that we can use as a guide for figures."

Upon his desk and at other places in the engineer's room were aneroid barometers, a new pocket device in shape like a watch especially interesting the young aviators. A barograph for automatically recording air pressure and indicating height in the air, not only received attention but was at once repacked in its case to be taken to Newark. A new aerometer was also wrapped up for the same purpose.

"This barograph looks like a good thing," the

engineer explained. "It has a recording cylinder that revolves by clockwork and the indicator needle bears on a series of levers which communicate their displacements to a pen arm. Each movement of the mercury is then recorded on the cylinder. On that you have a graphic story of your up and down journey."

Compensated and gyroscopic compasses, statoscopes for measuring equilibrium, thermometers and shaft speed indicators were also to be seen. But with the new barograph and the new aerometer, Ned and Alan seemed to content themselves for the time.

"Mr. Russell tells me the new 'Flyer' did all you expected of it," said the engineer.

"It 'll do two hundred miles at sea level when it 's tuned up," answered Ned proudly.

"Then you 'll certainly make your ocean flight?" suggested the engineer.

The boys immediately explained in brief the new program. The engineer heard them soberly.

"In that event," he said at once, "you 'd better take several days for experimenting with the wind and speed pressure of the new car. I can't guarantee that the figures made for the other machines will apply to this one. I 'll come to the works in the morning and make the kite and

ground records while you young gentlemen get me the flight pressures of the 'Flyer' under all conditions."

"Fine," exclaimed Alan. "You know you 'll have to project a new ocean course for us with all the variations, sailing rhumbs and course alterations."

"From New York to London?" asked the engineer nodding his head. "I wish you could have counted on the stops at St. Johns and Cape Clear in Ireland. I 'd have felt better about it," he continued turning to his desk and opening a large portfolio. "That chart is ready."

"Let 's have a look," exclaimed Ned.

On a United States Hydrographic Office "Pilot Chart of the North Atlantic Ocean," the boys traced a slightly circular line reaching from St. Johns in Newfoundland to Brow Head and Cape Clear, in Ireland just below which appeared the little dot indicating Fastnet Light, the first old world signal to passengers from America. Far north of any steamer route, the seeming curve of the lieutenant's projected line of flight was seen to be really a succession of straight lines—the sailing variations and compass courses from hour to hour.

In neat engineering letters, in a vacant place

on the map, was this memorandum: "From St. Johns, Newfoundland, to Fastnet Rock, Ireland, by great circle is 1666 miles. Initial course is N. 66 E. true. Final course is S. 81 E. Therefore you port one-eighth of a point every seventy-five miles easting."

Alan made a few figures with his pencil on a corner of the chart. "A point," he said aloud, "is eleven degrees and fifteen minutes. One-eighth of that is one degree and twenty-four minutes. Every seventy-five miles we port one degree and twenty-four minutes."

"Exactly," replied the lieutenant, "and that 's why you 've got to be right on your speed measurement. Then, knowing the distance covered, you can navigate by compass."

"The machine is out here eatin' her head off," shouted Bob at this juncture. "Get a move on, youse ducks, I 've wired the works to have lunch ready for us."

"In a minute," answered Ned. He turned to the engineer again. "Did you work out those distances and the time from St. Johns to New York by rail and steamer?"

In some of the preliminary talk on the possibilities of a transoceanic aeroplane service it had been suggested that the actual air flights be

between Brow Head or Cape Clear in Ireland and St. Johns in Newfoundland. But the boys had been so busy on the new sky-craft that they had not gone into the shore ends of this suggestion.

"I 'm afraid the company would beat itself by doing that," answered the engineer. "However fast you flew from Cape Clear to St. Johns, you 'd lose so much time by finishing the trip on land that the big liners would almost beat you in. It 's eighteen hundred and forty-five miles from St. Johns by rail through Nova Scotia up to Montreal and down to New York and the present train schedule calls for seventy-four hours to cover it."

"How about rail to Halifax and then by steamer to Boston and New York?"

"Worse," laughed the lieutenant. "That would take nearly eighty hours."

"That settles it," announced Ned picking up the barograph case. "It will be New York to London direct. We can 't afford to hustle over the Atlantic at two hundred miles an hour to lose one hundred and fifty miles an hour on a slow fifty mile an hour express train. Lieutenant," he added affectionately, patting their skilled assistant on the shoulder, "we 'll be glad to see you to-morrow and we 'll do all the experimenting you suggest. But, sometime in the next six

days, just piece out that ocean course and hook London and New York on the ends of it."

"That 's almost what I 'll do in reality," was the prompt answer of the engineer. "Until you figure it, you 'd hardly believe that a direct east or true great circle sailing course between London and New York would pass over St. Johns. But it 'll come mighty close to it. The route I 've projected," he explained pointing to the sweeping curve on the chart, "if extended on the same lines, will pass just south of New York bay."

Alan had the new aerometer under his arm but at this suggestion he laughed, put it down and opened an atlas of the world. Turning to the map of Ireland with his finger he followed the southern shore line until it came to Cape Clear. Nearby he made out a small town from which he traced the Cork, Bandon and Southern Railway, connecting through Cork with Dublin on the east coast. Then he slammed the book shut and exclaimed:

"All aboard, in Aeroplane Number One, for St. Johns, Newfoundland, Skibbereen, Ireland, and London. First stop St. Johns. All aboard. *Ocean Flyer* leaves in one minute."

Major Honeywell and their guest now appeared and Ned and Alan hurried with them to

the automobile. In the trip to the ferry and across the Hudson river Ned entertained the *Herald* manager with an account of what a flight across the ocean meant.

“Ordinarily,” said the journalist at one time, “all I have seen to-day and what you are telling me would make very good newspaper reading—to say nothing of what we threw away last night.”

“And I ’ve been livin’ in that kind of stuff for over three years,” volunteered Bob, “without writing a tenth of what I knew.”

“I ’m afraid your reportorial instincts are a little dulled,” laughed the editor.

“No, sir, not by a jugful,” retorted Bob. “When I do break out it ’ll be good and proper. They ’ve had me for three years just where they had the *Herald* last night.” Evidently Bob was a little touched by the comment of the editor. “If you ’ll excuse me, I ’ll make a guess you ’ve found out considerable to-day that *you* ain’t goin’ to print.”

“You ’re right,” laughed the editor heartily. “I ’ll withdraw what I said. Your friends seem wonderfully successful in keeping their business to themselves. You ’re quite right. The *Herald* is going to print nothing that will detract from the spectacular finish of what we shall try to do.”

"We 've been counting on that, of course," broke in Ned. "And even after we make the trip," he went on, "I hope the *Herald* will never print anything more than we tell its reporters. There are some ideas that we can only protect by secrecy."

"You mean that what I have personally seen and been told to-day is confidential? Of course. Feel perfectly free, while I am with you, to say what you like. All editors must be able to distinguish between conversation that carries news and the free talk of friends."

The car was speeding out of Jersey City on the marsh road westward toward Arlington.

"If every flight we have made over these marshes had left a mark in the air," remarked Alan, "that sky up there would look like a waffle."

"Are all three of you equally old in this aviation business?" asked the editor smiling and unconsciously looking skyward as if he really expected to see a maze of aerial paths.

"Bob is what we call an auxiliary," explained Alan. "He has n't flown as often as he wanted to but he 's no tenderfoot. However, his chance is comin'. He 'll have to make a full hand on this ocean trip."

“Will it require three of you to operate the machine?” the editor asked.

“Four,” answered Ned. “There ’s a young man out at the works, Roy Osborne—the son of the chief engineer—who has had experience all over the country. He ’ll probably be the fourth member of the crew.”

“Tell me what each one does,” asked the editor straightening up and grasping his Panama to make sure the speeding car did not tear it from his head. “Talk about two hundred miles an hour,” he added with a grimace as he saw forty-five miles indicated on the speedometer, “this is enough for me.”

“Me too,” announced Ned to the editor’s surprise. “There ’s more sense of speed right now in this car goin’ forty-five miles an hour—and more real danger too,” he added positively—“than there is in an airship going sixty miles an hour. In the air, our road bed is perfect. Here a rut may pitch the whole machine over the fence. High up in the air you have no objects along your path to measure flight. The ground is so far away that it is no criterion. In the air, at your highest speed, there is almost no sense of motion. It ’s like a swiftly ascending balloon in which you can only judge your flight by tossing paper overboard.”

"Tommy rot," broke in Bob, "you talk as if you were selling aeroplanes. Ruts in the road! There are more 'ruts,' 'holes,' 'pockets' and 'chasms' in the air than you 'll find on the worst roads on the ground. And that ain't all! You can 't see 'em till you 're in 'em. The death record this year tells what they mean too. As for bein' no danger, give me an automobile and a place to fall even if it is hard."

"Then you 're not going?" asked the editor wonderingly.

"Sure," answered Bob. "That 's one reason I 'm goin'. And that 's the reason the *Herald* is goin' to give us \$60,000. You can bet you would n't give us that for drivin' an automobile to San Francisco—even at top speed. It 's the chances we take of strikin' one of these 'gullies' up in the sky and turnin' turtle just where the Atlantic is deepest and wettest."

"He 's all right now," was Alan's quiet comment when Bob had finished. "Bob always blows off under pressure."

"Well," said the editor in turn, "I had an idea—a suggestion—but Mr. Russell's speech almost killed it. Still—"

"What is it?" insisted Ned.

"You said you had not definitely made up

your crew. For a time I was prompted to ask if all your operators had to be persons of experience with aeroplanes."

"They should be, on a trip like this," explained Ned, "but not necessarily so. They must have coolness, however, and nerve and endurance."

"Would it be out of the way for me to send a representative with you?"

"If you had the sort of man we could use, that is, one that could stand watch with us and who was not merely a passenger," answered Ned looking at Alan and noting that the latter approved, "it would not only be proper but we 'd be glad to make him our fourth man."

"I 'm sure I have such a young man," continued the editor quickly, "and he is just about your own age. I never saw him until two o'clock this morning."

"You mean the guy that tipped us off to the *Herald*," exclaimed Bob impulsively.

The editor nodded his head with a smile.

"The young man we saw leaving your office as we entered it?" asked Ned edging forward.

"Buckingham Stewart, a *Herald* reporter," answered the editor. "He seems to me to have all the qualities you name. I don't know that he 'll care to take the risk. If he does, I offer him as my representative."

“Don’t you worry about him not goin’ if he gets a chance,” volunteered Bob.

“Alan,” said Ned with a broad smile, “if this fellow was smart enough to find out all he did about the *Flyer* without a look at it in the daylight or a word from us, it ’ll take him about fifteen minutes to understand it when he really sees it. I say, take him.”

“I ’m agreeable,” answered Alan and the crew was complete.

CHAPTER IX

DUTIES OF THE *Ocean Flyer* CREW

President J. W. Atkinson of the Aeroplane Company, was always ready to offer chance visitors noon-time refreshment. In fact, for over ten days, the Airship Boys had not left the factory in the middle of the day but had devoted the resting hour to a hasty luncheon and talk with Engineer Osborne, his son Roy, an experienced aviator, and other skilled employes. Therefore, at two thirty o'clock, as on their previous busy days, the boys were at luncheon in the same place with their guests. Mr. Atkinson sat with them and kept Major Honeywell and the *Herald* managing editor company over their cigars.

In spite of the injunction of the engineer of the Universal Transportation Company (which by the way had no business connection with the American-Aeroplane Company although Mr. Atkinson was a heavy stockholder in each) that experiments should be made for several days to ascertain the wind pressure on the new airship in flight, it was at once agreed that these voyages must be made at night.

“The first appearance of such an unusual craft,” the editor argued, “would certainly attract wide attention. Publicity is bound to follow. The car ought never to appear by day until the real flight is made.”

This being conceded, Bob immediately sent a wireless message to New York notifying the engineer to report that night at the factory. The chef at the factory was not an unskilled one. The day was hot and a cooling drink he had invented and served received so many compliments that Chef Jasper was summoned from the kitchen. To be openly and personally congratulated by such a celebrity as the director of the New York *Herald* disconcerted Jasper. For a time he could not explain the composition of his unique beverage. But at last the pleasant mystery was revealed.

“Mah wife Lindy,” Jasper finally made plain, “she jes’ done git a bucket o’ fine, ripe, sweet churries an’ she pits ’em and biles ’em till de juice is jes lak ’lasses, puttin’ plenty o’ sugar in ’em till de surup is sweet ’nough an’ not too sweet. An’ dats all. When yo’ desiahs to make a churry coolah you done take a big col’ glass an’ fill it plum up full o’ crush ice, dry an’ powdah lak. Den yo’ takes a half a cup o’ de juice and dreen it down trew de white ice. When de ice

'gins to melt yo' pour de glass full o' ginger ale an' let her fizz an' bile. But not no Jersey City ginger ale. You wants English ginger ale cause Jersey ginger is sweet lak 'lasses."

"I suppose," said the delighted editor to the boys, "that you won't really need one of Jasper's 'cherry coolers' on your ocean voyage."

"We 've made several trips in the air," laughed Ned shaking his head, "in which we had to do a good deal of figuring on the food supply. This time this will give us little trouble. Sandwiches, bread and butter, some tinned beans, meats and made coffee for heating over an alcohol stove will be about our only supplies. It 'll be such a short voyage and such a busy one that eating will be the least of our troubles."

"Wait till the regular trans-atlantic service begins," laughed Bob. "You ought to see the sketch of the passenger car with its dining compartments. No 'short order' service; soups, roasts, salads, ice cream. And the sleepin' car—"

"But that 's to come," interrupted Alan. "Meanwhile, we have a rather comfortable car out here in the setting-up room. It 's ready for inspection."

"Just one minute," suggested Major Honeywell. "Your guest asked you a question on the

way out here that has not yet been answered. He wants to know the duties of the four members of the operating crew."

As they arose from the table Ned volunteered to explain.

"First, we must have a pilot constantly at the wheel. But his duties are not simply to keep a lookout ahead. His chief concern is to watch the control of the machine by counteracting the influence of unexpected air currents and those atmospheric obstructions that Bob calls 'ruts.' It can 't be denied that there are unexpected and indistinguishable puffs of air that will bump an aeroplane just as a rock or a piece of wood will bounce an automobile in the air."

"You are the pilot, I take it?" commented the editor.

"One of 'em," smiled Ned. "Mr. Hope is the other. We find it good policy to take three-hour tricks. The strain of a longer watch unnerves one. The pilot also controls the engines. But that does not relieve us of the need of a man in the engine room. This engine man, who on this trip will be Mr. Russell, who really knows more about an aeroplane than his conversation suggests, has enough to do. He watches the automatic fuel and lubricator supply feed pipes; the

compressed air gauges and pipe valves; the signal and illuminating light motor, the oxygen tanks, the plane valves, and if the rudders go wrong, he is the man who goes out and fixes them. In this instance he is also the wireless operator."

"When does he sleep?" asked Major Honeywell chuckling.

"When everything is going all right," answered Ned, "or when one of the pilots spells him off for an hour."

"And the fourth man?" asked the editor. "Everything seems provided for."

"The rear of the pilot room," went on Ned, "resembles a laboratory. It is the observation and record office of the ship. The observer in charge keeps the log of the flight, records the data that gives the pilot his bearings and enables him to find his way through unmarked space, prepared at any minute to sound warnings of perils ahead or behind that the eye can not detect. His record of the pressure of the aerometer gives the speed of the machine as nearly as instruments can show it. These figures, with our own tables of wind and flight pressures under all revolution speeds, give us approximately the exact rate of advance. He must watch and keep in operation the barograph or self-recording altitude gauge

which takes the place of the usual barometer; as a check he also notes and records periodical readings of the regular barometer; he keeps constant watch on the car equilibrium by means of the statoscope; he records the compass course, sets down the latitude and longitude by following the compass bearing and the advance in miles; is the pilot's clerk and keeps a record of the pilot's changes of course—"

"Is that the job my reporter is booked for?" interrupted the astonished editor.

"That 's the plan. It 's really Mr. Hope's work; he has the experience and he is personally acquainted with figures," answered Ned with a smile. "But I 'd like to have him to work with me. Of course we give a lot of attention to this work ourselves, as we 're right alongside."

"Then don't take him because I asked it," said the journalist hastily. "If you want him, take him of your own accord. I would n't recommend any one for that job."

Bob, passing a window on his way to the door, sprang forward suddenly, grasped the open window ledges and then turned as hastily toward those behind him. His face was a study.

"There he is, now," Bob stuttered. "He 's here again."

"I saw his face," shouted Bob pointing toward a young man in new overalls and cheap gloves who was running down a little tramway on which a car carried some castings.

"Was it Stewart?" panted Ned equally excited.

"Sure 's you 're born," exclaimed Bob. "He certainly has nerve. Hey, you!" yelled Bob out of the open window.

Their older companions having joined them there was a quick explanation.

"A *Herald* reporter!" almost shouted President Atkinson.

"And he 's been here four or five days trying to get a line on the *Ocean Flyer*," broke in Alan angrily.

Mr. Atkinson started on a run for the door but a word from the *Herald* manager halted him.

"The horse is stolen now," began the editor, smiling. "Any way, I 'll guarantee you against the young man's causing any trouble. Have some one bring him here. We 'll see what this means. He 's certainly persistent."

"All of that," replied Mr. Atkinson coldly. "We don't care much for spies around here."

"Nor I, anywhere," replied the editor in a tone that made the manufacturer turn. "He probably thinks he is doing his duty. At any rate, he has done no harm."

The party passed out of the dining room into Mr. Atkinson's office. In a few minutes a clerk ushered the overalled young tram car conductor into the room. His inquisitors were all seated. "Buck" Stewart looked at them wonderingly. His face wore no smile but he did not seem especially alarmed.

"Is n't your name Stewart?" asked the editor sharply.

"Buckingham Stewart," was the only answer but, as the young man made a closer inspection of those about him, a look of recognition came into his face. As he met Ned's glance there was even the ghost of a smile on his lips.

"What are you doing here?" went on the editor.

"Workin'."

"What for?"

"To increase my fund of information."

"By sticking your nose into other people's business," added President Atkinson warmly.

"I expect that 's true," answered Stewart as he drew off his gloves and revealed two very white hands. He also made an attempt to clear his wet face of perspiration. "I 'm a reporter—or almost was," he added, his smile broadening into a magnetic grin.

The editor held a whispered talk with Mr. Atkinson which turned the manufacturer's irritation into a milder mood.

"Were you sent here to-day?" resumed Stewart's superior brusquely. "I told Mr. Latimer I might want to see you."

"Then he forgot it," exclaimed Stewart promptly. "I asked for orders last night and was told there were none."

"But Mr. Latimer was in my office until after four o'clock," went on the editor pointedly.

"I waited for him."

"And he said—?"

"‘Nothing doin’, young man.’ Then I asked if I could come out here to-day and get my things."

"What things?" asked his questioner.

"My gloves and my new overalls," answered Buck without a smile.

"Have you been *getting* these all day?"

"I asked the foreman if I could get off to go to New York," responded Buck solemnly, "and he laughed at me."

"And meanwhile—?" began the now almost smiling journalist.

"Meanwhile, I twice just escaped bein' sent into the shed where the 'Ocean Flyer' is."

Despite his efforts, the straight face of the editor was breaking into a laugh.

"Your story 's dead," broke in Bob with a professional tone. "What are you hangin' around here for?"

"I don't know officially that it 's dead," responded Buck. "I have an idea it is n't. Any way, I thought I 'd finish the job. But I just missed it."

"What would 'finish' your job?" asked Ned suddenly and with animation.

"One good peek at your new airship."

"Come with us," exclaimed Ned laughing outright. "We 're just goin' to look it over."

"Stewart," said the editor recovering himself, "you 'd better get your time from the foreman. I am now on this assignment myself. We don't want to make it a case of too many cooks."

"Yes, sir."

"When you 've cleaned up, follow us. The *Herald* has another assignment where you and I won't clash."

The puzzled Buck watched the editor withdraw, trying to decide just what this meant. Ned and Alan taking charge of the older men, Bob held back a moment.

"You 're Russell, ain't you?" exclaimed Buck. "My name is Stewart. I 'm in the business too."

"I 've heard all about you," answered Bob. "You came near makin' a mess o' things by tippin' our hand."

"I reckon I ought to say I 'm sorry but you know the game. It 's all right now; I 'm fired from the job. And I guess it don't necessarily mean I 'm promoted, either. The city editor did n't tell me to quit. So I stuck another day. Now I 'm holdin' a fine, large empty sack."

Bob leaned over and caught Buck by the shoulder. The grimy Stewart was instantly alert.

"Say, kid," said Bob in a half whisper, "there 's something doin'. Wash up and get on our trail."

"Am I in wrong with the old man?" asked Buck eagerly in the same tone, catching Bob's hand.

"Not so 's you could notice it," answered Bob with a significant wink. "Trail us."

The aeroplane setting-up room of the factory resembled a union depot in floor surface. It's south or yard front was a drop of heavy canvas with roof supports at one hundred feet intervals. Within this far-reaching compartment, and dwarfing all other forms of aircraft, stood the *Ocean Flyer*. A heavy tarpaulin, partly covering the big central car, gave an added air of mystery to the gigantic machine. Its unusual weight was indicated by the fact that the big air-

ship was not resting on its extra size automobile landing wheels but was supported on temporary jacks.

"How do you get it in and out?" was the editor's instant inquiry as he noticed the one hundred foot wide entrances and the wing spread of one hundred and seventy feet.

"The landing wheels turn to any angle," responded Ned as he threw off his coat. "We move them sideways, push out one of the wing planes, turn the wheels back to a right angle and then 'the tail follows the dog.'"

While the three boys sprang on the side galleries of the car and began to draw off the protecting cover, the visitors advanced under the high, wide, spidery planes and gazed in wonder at the metal marvel. One after another, on each side, the dull, gun-metal colored planes reached out in unbelievable length and lightness. Braces reaching from the bottom of the car and metal cables from the top partly supported the vast expanse of magnalium steel sheets. But, toward the outer ends, the wings extended unsupported in apparent defiance of all mechanical construction.

"It 's the corrugated structure and the stiffness of the metal alone," explained Major Honeywell.

The decreasing length of each plane, the first eighty feet, the second sixty and the last forty feet, did not detract from the majesty of the structure and only added to its birdlike appearance. Each plane, made of three separate, telescoping fore and aft sections, measured twenty-one feet in depth. The immense pressure gauges, almost concealed under the curved front of the main plane, by which the rear sections were drawn in by cables on a spring drum until the chord of each of the three planes—or its depth from front to back—was reduced to seven feet, were almost concealed by the artfulness of their construction. Yet the spring drums and their extended cables were in sight, beautiful illustrations of the unique method by which the ingenious boys were able to provide pressure surface when they needed it and contract it when soaring speed demanded only a maximum of front or cutting edge. The curious, golden tinted “moon propellers,” like the thick, heavy wheels of a liner, suggested nothing of the long, oar-bladed propellers commonly in use. These, one on each side of the car, were located just beneath and forward of the front edge of the long planes. Powerful, magnalium chain drives connected these with the shaft in the car. Behind the chain drives a

light metal causeway extended twelve feet from the car to the propeller bearing so that the latter might be reached while the car was in transit, by an operator for adjustment and oiling.

“All right,” exclaimed Alan from the car gallery above. “Stand by to come aboard.”

The visitors hastened from under the shadow of the planes and looked up. The lead colored hull of a ship rose before them. A completely closed car, pierced with ports and doors, twelve feet wide, thirteen feet high and thirty feet long, extended between the first planes and disappeared in a maze of metal truss work in the rear—a magnesium braced tail seventy-three feet more in length, not counting the twenty foot rudder at its stern.

“And you mean to tell me that heap of metal can actually fly?” exclaimed the editor at last, unable longer to conceal his amazement.

“Like a gull and as fast,” answered a new voice and Buck Stewart, in straw hat and natty summer clothes, joined the group.

CHAPTER X

BUCK STEWART RECEIVES NEW ORDERS

"Come aboard," called out Ned, giving the young *Herald* reporter a look that also included him. The managing editor paused, seemed about to open a conversation with Buck and then said nothing. The smile of the latter was a combination of assurance and of gentlemanly modesty and breeding. Added to this was the charm of a faint southern accent. Buck was not exactly superficial but his peculiar and animated face never betrayed a lack of knowledge.

"Up the ladder," added Alan, and Major Honeywell led the way up a step-ladder to a short flight of landing steps lowered from a side gallery along the lower deck. Reaching this little metal gallery or walk, the boys led the two visitors astern to the end of the enclosed part of the airship and up a stairway that passed around the after part of the car to the second deck and from that to the top, where a protected walk or bridge extended the length of the airship car.

Bob, rushing ahead, caught up a metal jack

staff from its cleats on the bridge rail and unfurled a blue flag on which were the words "*Ocean Flyer.*"

"I think we ought to carry another flag now with *New York Herald* on it. We can carry the colors aft where they belong and put the *Herald* burgee on the port staff."

The editor seemed pleased. Looking from one boy to the other as if to get approval, he did not notice the look of sudden intelligence that flashed over Buck's face. Since two o'clock that morning Buck had been trying to answer the question: "Why had the *Herald* killed his story?" He knew there was a reason. For the last fifteen minutes a new problem had mystified him: "Why was his managing editor so interested in the new aeroplane?" The cross examination he had undergone the night before gave him many clues. The instant Bob Russell spoke of a *Herald* burgee for the *Ocean Flyer*, Buck's mental short circuit was repaired: "They 're goin' to represent the *Herald*," he concluded instantly—not stopping to reason,—“and this car is goin' to cross the Atlantic. Whatever these kids *meant* to do, the boss has now hooked up with 'em. The biggest thing they can do is to fly to Europe. The boss stopped the story to pull off the stunt in secret. I 've got to go with 'em."

The car on which the inspectors were standing resembled, in front, both the bow and the stern of a yacht. Seven feet from the bottom, the curving side lines ended in a cutwater edge. Above this, for six feet, the front was rounded and pierced by heavy, glass protected ports. Four feet from the bottom of the car, a shaft extended through the cut water carrying a third or auxiliary propeller, moon shaped like the side propellers, but seven feet instead of eleven in length. This reserve propelling force was for use in case either of the other propellers became disabled, in which event both side propellers would of course have to be shut down.

The heavy glass ports marked the pilot room. Directly over this and extending forward from the top of the car like the headlight of an old-fashioned locomotive, was the air compression funnel. This dull finished aluminum adjunct resembled a fog horn, and its functions were explained by the young aviators with considerable pride.

“We ’ll carry oxygen of course,” Ned said, “but we are so sure that our compressor will furnish us with enough air, that we ’re counting on it if we attempt a high altitude. Whether we go above a thousand feet depends on the weather

conditions. On that level we can fly one hundred and eighty miles an hour. And that 'll put us over in seventeen hours."

Buck was listening with both ears. At these words he knit his brows as he checked off figures on his fingers and then, with a pencil, did a problem on an envelope.

The party had just made a close examination of the funnel compressor and the two double acting acetylene and electric search lights. As its members turned, Ned came up with Buck.

"Can I help you?" he asked mischievously, noting Buck's calculation.

"Yes," answered young Stewart. "Let me go with you."

"Where?" asked Ned looking directly at Buck.

"Wherever you carry the *Herald* flag and wherever one hundred and eighty miles an hour takes you in seventeen hours which is 3060 miles from here—London it might be."

The major, the editor and Alan were advancing out on the tail runway to examine the big equilibrium plane and the gigantic rudders. Instead of answering Buck, Ned said:

"Do you usually use a pencil to find how much seventeen times one hundred and eighty is?"

"You don't reckon I 'm a lightning calculator

do you?" answered Buck. "I use a pencil for anything above the 'nines' when I want to be sure."

"Can you subtract sixty-eight degrees and forty-five minutes from seventy degrees and fifteen minutes?" asked Ned without a smile.

"Forty-five minutes from fifteen minutes?" repeated Buck twisting his pencil. "That don't seem right. O yes, you borrow, of course. One degree," he went on, "that 's—" and he hesitated.

"You know how many minutes there are in a degree, don't you?" prompted Ned, smiling at last.

"Three hundred and sixty," exclaimed Buck proudly.

Ned held up his hands in amazed despair. Buck did n't seem the most promising material for a competent observer. And yet there was something about the *Herald* reporter that made Ned anxious to take him along.

"I suppose there is n't such a job as steward or galley boy on this ship," went on Buck with his engaging smile. But Ned could only answer him with a shake of the head. Then, leading the way to the gallery of the second deck all passed into the pilot room. In no way, except in size did it differ from the wheel house of an ocean liner.

The compass box, with its compensating magnetic mechanism beneath and its shaded lights above, stood just in front of the steering wheel, beneath which, parallel with but not connected with it, was the larger plane elevating and depressing wheel. Both the steering and plane wheels operated indirectly, utilizing compressed air cylinders to move the big rudder and wing surfaces. At the right of these wheels was the engine control; a lever board containing the starting and stopping levers for each engine and the gear clutch for each wheel. At the left, in compact semicircular form, was the signal board, the automatic indicator which gave at all times a record of the position of each plane, the set of the rudder, the speed of the engines and, below this, the air craft chronometer.

Hanging at the pilot's left side and on a line with his face was a speaking tube. But it was on the rear of the pilot that indicators and gauges appeared in confusion. This was the observer's station. On each side of the room a small door opened onto the side galleries. Aft of the door on the port side a metal ladder led through the floor into the compartment beneath. On the starboard side, between the gallery door and the aft partition, stood the observer's desk. Here all read-

ings were recorded, the detailed log continuously set down and the observer performed his duty as assistant to the pilot.

Many of the instruments were enclosed in an outside case open to the weather and wind. Heavy glass doors gave the observer access to this case but his observations were to be made, in the main, through the glass. The aerometer, attached to the top of this outer case, registered on the observer's desk. The automatic barograph, the checking barometer and a self-recording thermometer were housed in the exposed case. Within the room the equilibrium statoscope, the compressed air gauge for all compartments, interior thermometer, chart racks, hooks for pressure and speed tables and indicators to show the consumption of fuel and lubricating oil, covered the walls except in the center of the rear bulkhead where a door gave access to the next compartment.

In this pilot room, the heart of the gigantic airship, Ned turned lecturer. The place was small and hot but no one seemed to mind these things.

"How about your compressed air funnel?" asked the major pointing to the bank of aluminum tubes that passed along the roof of the cabin. "Has it been tested?"

"That 's different," answered Alan. "That

proposition stands like the answer to two plus two. We all concede this is four."

"And you mean to say that you may send this thing seven or eight miles up in the air where a bird could n't live and where it may be sixty degrees below zero, on the theory that your funnel will gather in air for you and make heat enough to keep you from freezing?" added the editor.

"Just that," laughed Ned, "although, of course we don't have to stay up there. If anything goes wrong we 've got our oxygen and we 'll have clothing, too, that Peary or Cook might have used."

"But it *will* work," went on Alan with equal enthusiasm, "and the man at that desk, with his air-pressure gauges for each room and his stop cocks for each compartment, will keep us as comfortable as if we were at sea level and he 'll keep our engines running without a break."

"Stewart," suddenly exclaimed the apparently embarrassed editor turning to his reporter, "your story about this marvelous craft was killed last night because the *Herald* hoped to make an arrangement with these young men, its designers and owners, to make a trip across the Atlantic to London in the interest of the paper. This has been made. I think the assignment will be the

biggest newspaper beat ever achieved. What you are now hearing is confidential."

"Yes, sir," responded Buck. "Can 't I go along?"

"I was just about to say," went on the editor, "that, for a short time, I was disposed to ask the privilege of having a representative on board and that I meant to select you—"

"And you can 't find a place for me?" Buck interrupted with the fetching little twist of the mouth that had caught Ned.

"The only place open was this desk," explained Ned.

"I can do it," exclaimed Buck.

"You mean you 'd try," said Ned.

"That 's it," went on the editor. "I now see that I have no one who could be useful here. I withdraw my request. At least, young man," he added, turning to Buck, "I have shown my appreciation of your work by complimenting you with the suggestion."

"What 'd you have to do to these things?" persisted Buck, undefeated, after he had blushinglly acknowledged his superior's compliment.

"Something more difficult than multiplying one hundred and eighty by seventeen," announced Ned with a laugh.

His good natured smile yet showing on his lips, though puckered in chagrin, the disappointed Buck followed the party through the rear cabin door into the next compartment, "State-room No. 1." This little apartment, six feet high, eight feet wide and the same in depth, had a door and a window on each side and the metal frame work of a cot, six feet in length, against the rear wall, the remaining two feet of space being devoted to another door opening into a similar room. The compartment walls were of metal and perfectly bare. Beneath the cot was a metal tank six feet by three feet by three feet, in which fifty-four cubic feet of fuel could be stored.

"There are three of these rooms," explained Ned. "In each are electric lights, compressed air cocks and exhaust pipes. We 'll put thin mattresses and bed clothing in each."

"Put in some skeleton tables for typewriters and some camp chairs," suggested the editor. "I don't believe the men will have time for sleeping."

"And the last room, Number three," went on Ned, "we 'll rig up as a dark room for your photographer."

Buck could restrain himself no longer. Stepping to his superior's side he asked appealingly:

"Are you going to send *Herald* men on this trip?"

"They 're not going," answered the editor a little irritably as if this were getting too close to the real object of the trip. "They are coming back."

"Three or four of 'em," persisted the reporter.

The editor nodded his head slightly as if out of patience.

"Let me go across then," pleaded Buck. "If these men can come back I certainly would n't make much difference goin'. I *may* come in handy, somewhere. And I 'll stay, when I get there. Dump me out anywhere. I won't care. I know London like a book."

"You know London like a book?" exclaimed Ned instantly.

But Buck was at last too agitated to respond. His lips were twisting in an effort to show his usual composure.

"I say," repeated Ned. "Do you actually know London and its surroundings?"

"I 've lived there," answered Stewart, "and driven my grandfather's motor over every road I could find."

"Why did n't you say so?" almost shouted Ned. "You 're booked right now, young man, and this 'll be your room east bound."

"Me?"

“And we ’ll carry you three thousand miles to use you fifteen minutes or less. You ’re our landing pilot and what you don’t know about London you ’d better find out in the next six days.”

Buck took off his straw hat, wiped the perspiration from his face, hitched his trousers and then made his speech in two words. “Thank you,” he said and for the first time he seemed absolutely confused. Ned and Alan had hurried on and the elder men were crowding through the narrow door into the stateroom when Buck held out his hand and stopped his fellow reporter, Bob.

“Russell,” he whispered, “what ’s the game? You ’re on!”

Bob glanced toward the door and then, in a low voice, answered:

“We ’re goin’ to pick up three staff men in London at two o’clock on Coronation Day and, while they ’re knockin’ out the big story, shoot ’em over the Atlantic in twelve hours with the *Herald’s* next day leads. While they ’re clickin’ these off, the picture man in the back room is gettin’ ready all the parade stuff with snaps of George and Mary and flash lights of the show in Westminster—”

Buck eyed him open-mouthed.

“Ain’t you in on this?” he asked breathlessly.

"I 'm the engineer in overalls."

Buck's vacant stare suggested a vain attempt to think.

"Don't worry," laughed Bob, "you 'll be dumped in London."

"And you and I don't get a look in?" went on Buck, still absently.

"I 'm used to it," answered Bob. "My long suit is missin' big stories."

"And I 've made a good start," added Buck ruefully. "But," and suddenly the old twitch of his lips came back, "I 'll stick around as long as I can."

The two reporters met the inspection party at the rear of the enclosed car where the extra gasoline and ether tanks under the companionway leading to the tail truss were being examined. Then all descended to the lower deck and entered the sixteen by eight foot engine room. Through the center of this, in bearings, ran the big propeller shaft and next to the rear wall stood the powerful, unique engines that were to make success or failure of the perilous project. Fuel and lubricator gauges and indicators, shaft revolution recorders, an electric generator, a signal board duplicating the one in the pilot room above, racks of electric hand lights, tools and oil cans, the

compressed air pipes on the ceiling, fixed, green-shaded lights over the two circular engines, switch boards for the compartment, port and starboard signal lights and the forward search lights, acetelyne gas tanks and the heavy emergency clutch levers seemed to fill the compartment.

Yet, Ned led the fascinated visitors through this seeming confusion and for fifteen minutes attempted to make clear the mechanical complexity of the hitherto unheard of ether gas turbine double engine. When he tried to make clear how gasoline and sulphuric ether were to be combined to make a new explosive fuel of infinitely greater power than gasoline alone, and how this enabled them to economize in the amount of gasoline carried, the editor surrendered.

"I 'm glad to sign that contract," he exclaimed with relieved expression, "so long as I am the party of the first part that merely pays and you are the party of the second part that works this thing."

"And you 'll use it yourself," was the boy's confident answer, "before another year passes."

There was a look into the now vacant store room just forward of the engine compartment and the perspiring party made its way down the landing ladder. Ned spoke to his journalist guest.

“Mr. Stewart,” the editor immediately announced. “You are under Mr. Napier’s orders until you receive other instructions.”

CHAPTER XI

SHAPING A NEW COURSE

The program planned for the next six days was a full one. It was complicated somewhat by the fact that Ned left for Chicago a day later and was gone from Saturday morning till Monday morning, making a stay in the western city of five hours. That this was not a business trip was indicated by the fact that he did not visit the local office of the Universal Transportation Company. Mr. Napier and Mary Hope rode to the depot with Ned when he boarded the Sunday afternoon Limited. His last words to them were: "All right, I promise. We can 't possibly put this thing off. But when we get back I 'll bring Alan home and we 'll all take a good long vacation and go somewhere—not in an airship."

The *Herald* editor examined the *Ocean Flyer* Thursday, June 15. When he left in the motor car that evening, he took Buck Stewart with him, the arrangement being that the latter was to return the next morning and from that time do all he could to help the busy young men. One specific

duty was to stand guard over the new airship as an additional precaution against unexpected and undesired publicity.

Thursday evening, much to Buck's regret, Ned and Alan made a late-hour experimental flight, the company calculator having arrived. While the Airship Boys, assisted by Roy Osborne, who was now formally booked as a member of the crew, made speedy flights in all directions, even venturing out to sea again for a short distance, the engineer was busy in the "weather" tower of the plant. This important part of the works was a fifty foot tower rising from a flat-roofed corner of the setting-up room. Instruments in the tower automatically recorded wind direction, duration and force. From the roof below, kite experiments were also frequently in progress. From these, important meteorological tables were made. Small captive balloons might also be seen anchored from this roof at nearly all hours. On several occasions, the kites had been sent up 19,000 feet by use of metal cables and power-driven drums. The engineer's work in the night tests was to elevate small balloons to the level of the *Flyer* in flight and get exact data on the wind pressure. From this and the anemometer variations recorded on the flying aeroplane, it was possible

to estimate the actual advance of the airship under all aerometer readings.

Thursday night, Alan acted as engineer. Roy Osborne took the observer's post and Bob was in charge of the wireless. This was located in the after part of the store room on the lower deck. The antennae of the outfit followed the cables bracing the wing planes. But these, it was decided, were to be altered and rigged on masts erected on the top deck and tail truss.

The Airship Boys had been living in a private hotel. Before retiring that night, future accommodations had also been provided for Buck. When Ned awoke the next morning, a fuller significance of what had happened in the previous twenty-four hours seemed to present itself to the boy. He threw open the door of Alan's adjoining room.

He began by announcing that he meant to go to Chicago the next day and would be gone over Sunday. There was a time when Alan would have answered this statement with some facetious inquiry about his sister Mary. But that time had passed. "Got anything else on your mind?" was his only reply.

"Several things," responded Ned. "We have n't told the *Herald* yet about the London supply of gasoline and ether."

"It 's 'petrol' over there," explained Alan. "Don't you reckon they 've plenty of each?"

"Sure," answered Ned a little contemptuously. "But we 're goin' to be there less than an hour. We ain't goin' to have time to go out shoppin' for our fuel. And how are you goin' to take over half a ton of 'petrol' on board? In quart cups? There must be a good supply of it and there must be some sort of hose and pump."

"That 'll have to be arranged for by cable."

"And don't forget this," went on Ned. "You can 't count on finding dehydrated sulphuric ether for sale like peanuts."

"They don't sell peanuts in London," suggested Alan soberly.

"And they don't generally sell this kind of ether," answered Ned. "This is one of the things on my mind. This ether must be specially made and it should have been ordered by cable yesterday."

"Righto," answered Alan, who seemed in a specially good humor. "Why don't we take on some gasoline at St. Johns?" he added. "We can stop there."

"Because we won't need it," explained his chum. "And we ain't goin' to load up with anything we don't need. I 'll run into town and see

the *Herald* about these supplies. When Stewart comes out you can tell him he 's in charge of the larder. And I wish we could get that new sailing chart at once. The lieutenant ought to go to the office and work on it in the afternoon. He can come over here in the evening for the pressure tests."

Plans for certain alterations in the ether tanks having been talked over while at breakfast, it was decided that Ned should go to New York on an early train and have a personal conference with their journalist patron while Alan and Bob went to the aeroplane factory and started the work on the airship. While waiting for the editor to reach his office Ned did some shopping in the clothing line, and at a sporting goods outfitter, laid in special outdoor underwear, felt boots, wool jackets, fingered mittens and heavy caps for five persons. He also made a note of what the returning *Herald* men would need, to be given to the editor to be included in his many other cabled instructions.

"It 's a pity," said the editor a little later when Ned met him, "that we did not get together a few days earlier. We should have sent a man across on the steamer with full instructions. However, we have five days and our own cable. Don't hesitate to tell me all you need."

Ned carefully went over every preparatory detail, made memoranda of the supplies needed, described the grade of gasoline and sort of ether needed, and drew up suggestions how these articles were to be delivered to the *Flyer* in Hyde Park. There were also instructions to the men as to typewriters, what facilities could be expected aboard, the kind of clothing needed, the absolute necessity for promptness in reporting for embarkation and a list of food supplies for the return trip. Then the editor and Ned reviewed the plans for shipping the *Telegram* matrices in New York bay.

Close figuring showed that, while it was a fraction under ten miles from the Aeroplane Company's yards in Newark to the point off the old Battery in East River, where the sea tug would be waiting, it would be advisable to allow the newspaper operators at least twenty minutes for transporting the forms to the Ship News wharf and to start the *Flyer* on signal about ten minutes before the expiration of this period. This meant that the double set of matrices would leave the *Herald* office on a fast motor at two o'clock; that the *Flyer* would leave Newark about two ten and, advancing under slow speed, pass over the waiting tug at two twenty.

"If everything is ready and the packages are in position when we approach," suggested Ned, "show a white flag. If there is delay, show a red flag. Then we will veer off and return when the white flag is shown."

"And the return?" asked the editor. "Getting away seems simple enough and landing in Hyde Park, London, ought not be difficult, barring police interference, which I hope to prevent through influence, but what can we do to help you at this end on your return trip?"

"We 're going to try to deliver the copy and pictures right at your door," laughed Ned, "to-wit, on the roof of the *Herald* building. It isn't going to be so difficult to pick up New York at night although we may be flying pretty high. The coast lights will be our guides until we are in sight of the glare of the city. Then we 're going to take a chance and drop right down over it. We 'll keep to the north and avoid the sky scrapers. Fortunately, the *Herald* vicinity is pretty free of tall buildings. All you can do is to show us our signal: a green diamond. Rig up four search lights on the roof and let the lights point upward from midnight till we get there. And keep the roof clear when you see our lights. I 'm hopin' to drop your copy and picture bags between one and two o'clock."

The editor was aglow with enthusiasm.

"And the men?" he asked.

"Our signal will be showing at the Newark works and a motor will be waiting there. Your men may be with you an hour later. And keep your wireless man on duty. We may be calling at any time after we are within two or three hours of the coast."

After nearly two hours of close conference Ned and his patron adjourned for luncheon, at which another phase of the coming experiment was discussed:

"Do you think the perils of the voyage will upset our men?" asked the editor.

"They might," answered Ned, "if the machine was the fragile aeroplane commonly in use. But I 'll see that the men have no excuse for getting panic stricken. Before we start, I 'll put them in their staterooms and lock the doors. They 'll hardly know when we get away. They 'll know nothing as to our height or speed. All they 'll have to do is to pound on their stories, eat when they 're hungry, and sleep when they get tired."

"Are you going to lock young Stewart in a room?" inquired the *Herald* manager.

"Not him," chuckled Ned. "He ain't that kind. He 's been promoted already to the posi-

tion of chef. Don't worry about that boy. I would n't be surprised if he turned out an able 'birdman' before we get away."

As Ned was to leave the next morning for Chicago, not to return until Monday morning (the *Flyer* was to sail Wednesday, June 21, at 2:10 P. M.,) he took a taxicab to the New York-Chicago office after leaving the editor. It was his intention to have a look at his mail, a talk with Major Honeywell, and then catch the three o'clock train for Newark to see how Alan and Bob were progressing with the alterations. To his surprise he found the engineer in his office. He had followed Alan's suggestion at once and reached New York some time before noon.

"I thought I 'd make your new chart to-day," he explained, "so that you could see it before you leave for Chicago." The lieutenant's big flat drafting table was covered with United States hydrographic Atlantic Coast charts and English Admiralty maps of the Irish and English sea lines and harbors. The officer himself was at another table busy with logarithms, trigonometry and almanacs of latitude and longitude.

"Fine," exclaimed Ned, to whom such details were always fascinating. "What have you found?" In another instant he had thrown off

his coat and was perched on a corner of the lieutenant's desk.

"I 've found something that may surprise you," answered the engineer laying down his pencil. "The continuation of the other St. Johns, Newfoundland and Fastnet Light, Ireland, course won't do at all. A great circle course from New York is going to take you miles north of St. Johns. And it 'll pass far to the north'ard of Fastnet Light."

"Is that so?" responded Ned, not a little amazed. "What 's the distance?"

"Something over 3,200 miles."

"Good," exclaimed Ned. "That 's fine. Much over?"

"Exactly three thousand two hundred and eighteen and one-tenth miles. And that beats a steamer course about two hundred miles. It figures eleven hundred and sixty miles from New York to where you leave the American shore line and it 's two thousand and fifty-eight and one-tenth miles from that point to the center of London, three thousand two hundred and eighteen and one-tenth miles of traveling."

"Better and better," exclaimed Ned.

"And now I 'll really surprise you, I think," went on the engineer, resuming his pencil. "In

all of that first eleven hundred and sixty miles you 'll hardly be out of sight of land. You 'll have capes, islands, buoys and lights as steering points nearly all the time." Ned's eyes opened and the engineer arose and led him to a big, great-circle chart of the Atlantic ocean. "I suppose," continued the calculator, "that you think, after leaving New York harbor, you 'll pass out to sea at once."

"Of course," exclaimed Ned. "Where else could we go?"

"You 'll go east on Long Island sound to S. Norwalk, Connecticut. Then, you 'll start over the land, cross Connecticut a little south of Hartford, pass over Massachusetts ten miles north of Boston and come to water again off Ipswich, Massachusetts, near Cape Ann. From that point you 'll begin to take a calculated course, shaped from Thatcher Island lights, and steer over the Gulf of Maine N. $65\frac{1}{2}^{\circ}$ E. till you raise Matinicus Island. There you 'll veer to E. N. E. $\frac{1}{4}$ E. till you 're over Grand Manan in the mouth of the Bay of Fundy. Sailing ahead E. by N. you 'll pass up the north arm of Fundy to the town of Amherst in Nova Scotia. A new course E. $\frac{1}{2}$ N. will take you across Northumberland Straits and Prince Edward Island to Cape Anguille in west

Newfoundland, and then to the east coast at Fogo Island."

"What 's that?" asked the interested Ned.

"Only a name," was the engineer's answer. "But it ought to be better known for it is the exact place where a direct line from New York City to London cuts across the easternmost sea line of our part of the world."

"And then?" continued his rapt listener.

"Fogo Island is $50^{\circ} 5'$ west longitude and $49^{\circ} 43'$ north latitude. With an initial true course from this point of E. $\frac{1}{4}$ S. you 'll hit one of the Arran Islands in Galway Harbor, west coast of Ireland. In these short courses across the states, the Gulf of Maine, Nova Scotia and Newfoundland, a true course is exact enough considering your land and sea marks—you 'll pass over islands and light houses every few miles. But, when you leave Fogo it is another story. By night I 'll have you a plotted chart of your ocean leg showing the magnetic variations and the alterations you must make in your true course."

"Then it 's almost a land journey for the first thousand miles?"

"On which you can watch summer guests at Mt. Desert Island, shore yachts along the Maine coast and, like as not, deers scampering over the pine tree covered rocks of New Brunswick. You could almost do it without a compass."

CHAPTER XII

HOW THE FLIGHT WAS TO BE MADE

When Sunday came, Alan, Bob and Buck were glad enough to ease up on their work. Supplies to be used on the flight were now accumulating in a corner of the setting-up room. All the boys took luncheon with President Atkinson this day. In the early afternoon the manager of the *Herald* got Alan on the telephone and a long talk followed. At its close Alan announced a surprising development.

"The editor," Alan explained, "has a new proposition. I did n't agree with him because I want to talk it over with Ned. I 'll wire him at Pittsburgh this evening and in the morning I 'll board his train and go on into the city with him. If it comes to anything you fellows will be interested."

"And we 've got to wait till to-morrow to know?" asked Bob.

"He wants to get up the story of the *Flyer* and what it 's goin' to do, and spring it the night we get back."

“*My* story?” asked Buck. “The one that was n’t printed?”

“The *real* story,” added Alan nodding his head, “for I reckon you ’d get a different angle on it now.”

“You ’re talkin’ now,” sighed Buck. “My, but I ’d like to have another chance at it.”

“The *Herald* may give you all the chance you want,” went on Alan, “if we agree to the plan.”

“Spit it out,” broke in Bob, his eyes dilated.

“Well, the idea is this. Neither the *Herald* nor Ned and I want to do any talkin’ if this thing ain’t a go. If we stick our nose in the Jersey marshes or drop into the Sound we ’ll let the other fellows guess at what we were tryin’ to do. But as the *Herald* suggests, if we reach London and get back, there is n’t any reason why the story should n’t be told and told right. The editor wants to get up a full account of the *Flyer*, its motive power, pictures of it, the program of its proposed voyage, the route and a sketch of its ‘brilliant’ crew, and have it all ready to print the moment we return.”

“But what if we don’t quite do it?” broke in Buck.

“There won’t be any story to print,” laughed Alan.

"How are *we* interested, specially?" asked Bob, pointing to young Stewart and himself.

"You 'll have to write the story, that 's all," answered Alan. "Who else could?"

The young Kentuckian sprang to his feet.

"I told you I 'd stick around," he cried. "I told you something would turn up."

"Say," added Bob skeptically, "don't get excited. I 've been on the point of almost puttin' over a story about those wise young fellows a good many times. But don't you count on 'em. Don't forget they have n't consented yet. I 'm not goin' to believe there 's any job like that comin' to me till it gets here."

"The way things look now," continued Alan, laughing, "I think I 'm in favor of the idea. If Ned is, it 'll probably go through."

Neither of the reporters waited for formal orders. During the afternoon they persuaded Alan to have the giant aeroplane hauled out into the deserted factory yard, and Bob photographed it from every angle, getting views in general and in detail. Alan was also pictured in a half-Arctic costume. That evening, borrowing typewriters from Mr. Atkinson's business office, Bob and Buck began writing a story that they hoped would be wanted.

“I know the machine, now,” suggested Buck. “I thought I did once before but now I do. I’ll tell about it; how it was made and all about their nightly experiments. You tell about the trip, how it’s to be made and how the thing is to be navigated. And don’t forget to get in an account of the Airship Boys.”

Not being under the pressure of a press hour, neither reporter finished his work that night. In the morning their duties in the setting-up shed called them to the plant. But at noon, when Alan told them over the telephone that the new plan had been approved and that they were to report at the *Herald* office at once, they were off on the first train, their pockets stuffed with manuscript and camera films. Ned and Alan left for Newark on the three o’clock train with the engineer’s completed sailing charts and at eight Buck and Bob had completed almost nine columns of the big story.

This work was not done in the big local and telegraph room of the paper but in an adjoining editorial office. It was in charge of Mr. Latimer, the night city editor of the *Herald*, who for four days, representing both the *Herald* and *Telegram*, had been preparing for the great event. He told Buck and Bob of the special edition which con-

tained features of all kinds that might interest Englishmen or represent the good wishes of Americans from Canada to the West Indies.

The engineer's final report on the direct or "as a bird flies" route between New York and London was complete in all details. To Alan, a mathematician and calculator himself, it appealed as a fine picture interests an art connoisseur. Although the company expert gave the initial direction from the Battery (magnetic course N. 67° E, and the compass point as E. N. E.), and the names of the larger towns in Connecticut and Massachusetts over or near which a direct line to Ipswich, Massachusetts, would take the aerial navigators, he left this portion of the line of travel to be worked out for land marks and other details by the boys themselves.

For the use of the pilot he had furnished full directions covering the trip between Ipswich and Fogo Island, off the east coast of Newfoundland, and for the ocean voyage proper, a North Atlantic Pilot Chart plotted on rhumb lines, and a table of true and magnetic courses with latitude and longitude indicated. The directions and table were carefully printed that they might hang in front of the pilot. The chart was mounted so that the observer could check off the advances.

As soon as Newark was reached the two boys provided themselves with large scale maps of Connecticut, Massachusetts, Newfoundland, Nova Scotia, Ireland and England. Late that evening when the elated journalists reached the hotel, Ned and Alan were yet busy with rule and dividers locating land points, towns, railroads, rivers, hills and lakes. The data on the water voyage and the big northward bend of the charted ocean route instantly mystified Buck.

"Do you mean to tell me," began the astounded Bob, "that when we start for London we 're goin' to begin by crossing over Connecticut?"

"Forty miles up the sound," explained Ned.

"Why don't we go right at it and hit the water?" added Buck. "What 's the use of losing time to make that big curve? Want to keep over the land as long as you can?"

"Say," laughed Alan, "you fellows did n't happen to try to tell anything about our course in your story, did you?"

"Certainly," answered Buck, "I said we 'd sail east as the crow flies."

"Well," responded Alan, "we 'll never sail exactly east. Do you know what a great circle course is?"

The good natured Buck blushed and shook his head.

"It 's an imaginary line that shows the shortest distance between two parts of the world and it 's curved because the maps we generally use represent the curve of the globe and a straight line on these would n't show the shortest distance," volunteered Bob promptly and proudly. "But I did n't know it ran over Connecticut."

"Correct," exclaimed Alan.

"But what 's all these figures?" went on Buck.

"They 're to keep us on our course. You 'll find the same charts in the navigating room of every liner. With these and our compass we hope to cross the Atlantic without attempting an astronomical observation for our bearings."

"But out here on the Atlantic you 've got a path laid down in ink. And between Ipswich and where you leave Newfoundland you have n't any path!" continued the inquisitive Buck.

"For this reason," explained Ned. Then, pausing, he continued, "Bob, you ought to understand this. You were with us in Bering Straits and Beaufort Sea. You tell him why."

"Pie," grunted Bob. "Maybe you think I don't know. On short legs," and he winked, proud of his nautical record, "where there is n't much variation in the compass—"

"You know," volunteered Alan, "that you can't pick out a compass direction and stick to it for a long voyage. You 've got to allow for the lessening tendency in the compass needle to point directly toward the magnetic pole."

"I 'd have got to that in a second," protested Bob. "Well, where the distances are not great and you have land marks or lighthouses or buoys to bring you up if you go wrong, sailors generally set a course by compass and allow nothing for the variation of the needle. They may shy off a few miles but a headland or a known lighthouse will bring 'em right again. But, on the high seas, it 's a different story. When they begin a voyage a course is laid to an imaginary point—say three hundred miles out. You can pretty nearly tell when you 've covered this on a steamer by the speed of the engines. On a sailing vessel it 's often necessary to find the point with an observation for longitude and latitude. When that point is reached, the course is altered and a new point taken. The direction of this is marked down by compass. That 's called the 'true course.' Then, knowing your latitude and longitude, you 've got to calculate what the magnetic variation will be in that place and from that you get what 's called a 'magnetic course.' That 's the one you sail. And you do this over and over till you get there."

Poor Buck shook his head, not much better off than before. Ned picked up the engineer's table of courses for the ocean flight.

"Look here," he began, pointing to the chart. "Let me try. See Fogo Island up here—where we leave Newfoundland?" Buck wrinkled his forehead and looked. "Well, the bearing of that is known—it 's 54° and $5'$ west longitude and $49^{\circ} 43'$ north latitude. Our course from that looks like a curve but the curve is really made up of short straight lines. We make our first straight line end at a convenient place on our curve. The first one stops at 50° west longitude and $54^{\circ} 40'$ north latitude. For a navigator it is now a question in mathematics to find the true direction between these two bearings. In this instance you 'd reach the end of the first straight line by sailing N. 67° E., from Fogo Island. That is, you would if it were not for the variation in the compass due to the magnetic pole. In this latitude and longitude the variation would be $33\frac{1}{2}^{\circ}$ W. Then it 's a question of more mathematics and your true course of N. 67° E., becomes a magnetic course of S. $79\frac{1}{2}^{\circ}$ E., or, by compass, E. by S."

"I ain't goin' to be called on to do that figurin', am I?" asked the alarmed Buck.

"It 's all done," laughed Ned, "thanks to our engineer."

"Well, or try to understand it?" persisted Buck. "For I might as well let you in on a secret: I don't understand a bit of it. If you can start goin' N. 67° E., and then go the same way by runnin' S. 79° E., you 've got my goat."

"Oh, you 're not so much wiser," exclaimed Alan when Ned and Bob laughed at Buck's perplexity and frankness. "Neither of you could make one of these calculations."

"Right," retorted Ned, "but you watch me use 'em."

Bob had been studying the Ipswich-Fogo courses and data.

"I think I could almost do this part of the trip myself. It 's pretty plain sailin'."

Ned took up this section of instructions and produced a map of the Gulf of Maine and the Nova Scotia peninsula. A straight line had been drawn on it from Ipswich harbor to Fogo Island.

"We can start from Ipswich almost any old way, so long as it 's seaward," he began with another laugh. "But, when we pick up the two lighthouses on Thatcher's Island off Cape Ann they ought to lie ten miles abeam to the south."

"What 's abeam?" asked Buck innocently.

"Anything at right angles with the deck," explained Bob learnedly. "That means when a ves-

sel is nearest to an object it 's passing. In other words, when you don't see it forward—I mean for'ard—or astern."

"At that point," continued Ned, "we simply bring our vessel on a plain compass course of E. N. E., and buckle down to it. If it were night, when a little later we passed a red and white flash light eight miles abeam to the north—"

"Nor'ard," corrected Bob.

"To the nor'ard," repeated Ned, "we 'd know exactly where we were—fifteen miles from Thatcher's Island and off the Isle of Shoals. And so it goes across the Bay. Ninety miles farther, or a half hour's flight, ought to put Montigan Light twelve miles abeam north of us, if we are on our course. Then it 's 105 miles to Matineus with its two fixed white lights."

"Oh, I see," commented Buck with a chuckle. "You 've got a mile post every hundred miles or so."

"Every half hour or so," replied Ned significantly.

"And a height from which we can see fifty or sixty miles in a pinch," added Alan.

"That *may* make a difference," acknowledged the reporter.

"Then, something comes every few miles,"

went on Ned, "points abeam, north or south, but always in sight; thirty-two miles to Mt. Desert rock, Great Duck alongside; seventeen miles to Petite Manan, sixteen miles to Moosabec, nine miles to Libby, seven miles to Machias Seal Islands, nine miles to Cutter's Harbor and then twenty miles to the east end of Grand Manan, a big island. At Matinicus we change our course from E. N. E. to E. N. E. $\frac{1}{4}$ E., and when we pass the fog horn on Long Eddy Point at the east end of Grand Manan, we change again to E. by N."

"When do we get there?" asked Buck soberly.

"That 's about five hundred and fifty miles from New York," replied Ned in the same tone. "Allowing a safe margin, if we leave New York on schedule, at two twenty P. M., we ought to lay Eddy Point abeam before six o'clock or better."

"What 's the good o' all the lighthouses in the daytime?" commented the reporter.

"A lighthouse usually stands up in the air," Bob put in, "and in many cases, they 're white. Besides, and you may as well keep this in mind, we 'll be returning that way the next evening sometime about nine o'clock when the lights are working."

"Very good," responded Buck. "I understand that at least."

“Got enough?” asked Ned, yawning and looking at his watch, which marked after midnight.

“Go on,” exclaimed Buck with alacrity. “Acquiring information is my long suit. When do we get to Nova Scotia, the ‘Land of the Blue Noses’?”

“From that on,” answered Ned, “we ’ll follow its shore, for we ’ll be over the north branch of the Bay of Fundy where the tides come from—the ‘fog factory.’ On our north, we ’ll pass the city of St. Johns, New Brunswick, forty-five miles farther east, and then for seventy-five miles the rocks and trees of New Brunswick will be almost beneath us. At the town of Amherst, where the Bay of Fundy ends, the *Flyer* will have fifteen miles of Nova Scotia to cross.”

“We ought to have supplies there,” broke in Alan.

“No stop scheduled,” commented Ned tartly. “On the east side of the peninsula of Nova Scotia we ’ll strike Northumberland Straits at Cold Spring Harbor. At Amherst we alter our course again to E. $\frac{1}{2}$ N. Northumberland Straits are twenty-five miles wide. Then it ’s Prince Edward Island, which we cross. That puts us over the Gulf of St. Lawrence with a one hundred and sixty-five mile glide to Cape Anguille on the west

side of Newfoundland. There 's a light on Anguille Point. A last run of two hundred and forty miles across Newfoundland brings us to Fogo and the real start. Then it 's 'ho for Galway Bay' in Ireland and London Town."

"It says we change our course to E. $\frac{1}{4}$ S. at Anguille," added Alan, who was following the directions.

"That ought to make it easy," remarked Buck with one of his grins. "Do we stop at Fogo?"

"Not so you could notice it," said Ned with a snap. "Good night."

CHAPTER XIII

ROY OSBORNE'S "PICK-UP CRANE"

Just before one o'clock on the afternoon of June 21 ten persons sat down to luncheon in the private dining room of the American Aeroplane factory. President J. W. Atkinson, of the company, and Mrs. Atkinson; Chief Engineer Osborne and Mrs. Osborne; Night City Editor Latimer, of the *New York Herald*, and the five members of the crew of the giant aeroplane—the *Ocean Flyer*. These were, Ned Napier, captain and pilot; Alan Hope, first officer and pilot; Roy Osborne, observer and calculator; Robert Russell, engineer, and Buckingham Stewart, "assistant engineer" and "English pilot."

Not a member of this crew had been in bed less than ten hours the night before. And, as an athletic trainer would have expressed it, there had been only "light work" that morning. One after another, the Airship Boys and their associates had met at the setting-up room of the big plant where, from time to time, many of the older employes of the works had also gone for a last in-

spection of the aerial craft that was soon to start on its astounding voyage seaward in an attempt to cross the Atlantic—to make good its projector's prophecy of "New York to London in Twelve Hours."

"But, remember," explained Captain Napier more than once to those who persisted in crowding around him, "I 'm frank to confess we 're going to take advantage of a technicality in our attempt to do this. And the twelve hour trip, if we can make it, will be from London to New York—not eastward. At the speed we have planned to make, we could n't do it; we 'd have to be in the air seventeen hours. Going over, we 've got to add five hours and a fraction to this because of the time we lose; that 'll make us twenty-two hours going. We ought to reach London between twelve and one o'clock to-morrow. But coming back," and Ned's face showed a grin, "look out! We 'll gain five hours in clock time. We 're goin' to start back at one thirty P. M. We 'll be in the air seventeen hours again but we 'll get here in twelve hours by the watch—at one thirty the next morning."

So far the big aeroplane had not made a single daylight flight. Every test had been made under cover of darkness. And in spite of the long voy-

age now about to begin and all the activity that this had necessitated, the secret of the *Ocean Flyer* had not passed beyond its makers and their friends. With fuel, chemical and lubricator tanks full, every tool and appliance in place, provisions and clothing aboard, the final inspection of the car took place just before noon when Mrs. Atkinson and Mrs. Osborne went aboard.

Roy Osborne, the young professional who was to act as observer and assistant to the pilot, hardly needs a description. About the age of Ned and Alan, he was already an experienced aviator. More than once he had represented the Aeroplane Company on daring and dangerous airship expeditions. When not so employed he was the factory expert testing new machines. He also had a national reputation, and considering his mother's aversion to having him undertake the present trip, the boys were doubly fortunate in signing him as a member of the crew. Mrs. Osborne had only consented after her husband, Chief Engineer Osborne, had decided that there was n't a mechanical defect in the new aeroplane and that, in his judgment, it had better than an even chance to make a successful flight.

In spite of some forced joviality the luncheon was not very lively.

"Don't eat too much, boys," suggested Buck Stewart. "The pantry is well stocked. I 'm going to serve tea about five o'clock, dinner at seven and supper at midnight, wind and weather permitting."

"You mean Captain Napier permitting," suggested Bob. "We 'll probably eat and sleep when he gives the word."

"In less than an hour, Roy," spoke up Ned, evading comment on the statement, "we 'll find out all about your 'pick up crane.' If it don't work," he went on with a smile, "and our freight is dumped into the sea, we 'll come about, hang you through the engine room trap and make you pick it up with your hands."

"Give me the wheel," answered Roy with spirit, "and I 'll pick it up. But my crane won't reach out and grab your bundle unless you put the machine where it ought to go."

These references were to the devices installed on the *Herald's* sea tug and on the airship for picking up the matrices while in flight. A somewhat enlarged copy of Roy's land crane had been selected. The tug, of twenty-foot beam, was equipped with two twenty-foot masts stepped abaft the engine house. These provided a space of fifteen feet in the clear between their tops.

Some experience in tackling a foot ball dummy had given Roy the idea for the equipment of these spars. On the top of each, to which it was elevated by a block and tackle, was a spring hook that released instantly under sharp pressure. Between these hooks extended a looped rope or cable, to the center of which was attached the article to be taken aboard by the flying car.

On the aeroplane, well to the front, a hinged metal arm dropped about ten feet below the car bottom. It was in the shape of a long, acute letter V with one side against the bottom of the airship and the other pointing forward on a wide angle at its mouth. The acute end of the arm ended at the trap door in the bottom of the engine room. Rushing toward the freight to be loaded, suspended between the masts and held by the spring hooks, the metal V crane would be lowered in place. As its arm passed under either the freight itself or the cable holding it, the metal crane would guide the package or cable swiftly along the angle until the narrowing slot of the apex caught and held the object. At the impact, the spring hooks released the sustentation cable and the motion of the aeroplane held the freed article until it could be secured through the trap door. At the apex of the crane the arms were jointed

and held in place by a bolt. By loosening this, the lower arm could be folded parallel with the upper one and thus made fast against the car bottom until needed again.

"I 'd think you 'd have a net, like those on street cars," suggested Buck.

"When you can tell us how to use a net without danger of knocking your freight farther from you, we 'll be glad to try it," answered Roy.

"You can 't pick up a passenger with it, can you?" went on Buck, who was desperately trying to make conversation.

"No," answered Roy, "and I don't know any way to take on and land passengers when trains are going sixty miles an hour."

When some one commented on the absence of Major Honeywell from the luncheon it was soon explained that he would be on the *Herald* tug, preferring to get the latest possible view of the departing *Flyer*. At half past one o'clock Mr. Atkinson's telephone called Ned. It was the *Herald* editor who only wished to give the voyageurs good luck, to ask if everything was ready and to announce that the program of the *Telegram* would be carried out on the minute.

"You have the *Herald* code book," were his parting words. "Try to send me advices from

Ipswich and Nova Scotia if you can. In London, the *Herald* representatives will look after your arrival. Don't bother about anything but getting safely across and back. You have the best wishes of the *Herald*. Good-bye and good luck."

Ned and those about him did not know that the great editor, as he hung up his receiver, sighed and for a moment leaned his head in his hand. The journalist realized that he was sending five young men on a mission in which there were overpowering odds of death unnoted in time and unmarked in place. Then he thought of the time when, as a young reporter, he rode six days with the thermometer forty below zero to interview Sitting Bull, and he was an editor again.

Since it had also been decided that the *Telegram* as printed in London was to contain matter describing the *Ocean Flyer* and a brief "advance" story of its plan of flight, it was accepted as inevitable that these details would return to all American newspapers in time for publication the same morning that the *Herald* printed its own elaborate account. It was planned, therefore, that the *Herald* was to arrange to publish a much fuller and better story by using, in addition to the story in hand, the log of the *Flyer* for the description of the actual flight, and to augment this by

adding the particulars of the start in Newark as well as a graphic account of what took place while the aeroplane was in London.

This accounted in part for Mr. Latimer's presence at the luncheon. He had assigned himself the duty of preparing the story of the start. He had also another mission. While making his first inspection of the aircraft that morning he had arranged with Bob Russell for a lively account of both flights to be ready on the return and to be delivered with the great coronation story.

"I ain't puttin' anybody's nose out of joint, am I?" asked Bob at once when first approached on this subject.

"Whose nose?" asked Mr. Latimer wonderingly.

"Stewart's, of course," answered Bob. "He 's the *Herald* man, you know."

"But I thought Stewart was n't coming back!" said the night city editor.

"I know he is n't," answered Bob with a wink. "But what if he does?"

"In that event," replied Mr. Latimer, smiling, "he won't need any instructions. We can count on him for twice what we can use. And we 'll run it as 'The Only Passenger's Story.'"

By two o'clock, each of the crew—except Ned

—had gone through the final formality of farewell and mounted into the car. The big aeroplane, silent and strong, stood on the starting-ways facing the east, as if anxious for the touch that was to start its planes into vibrant life. Just within the open window of Mr. Atkinson's office Mr. Latimer sat at the telephone, watch in hand. Just without, his shirt sleeves rolled to the elbows but with a heavy gray sweater on his arm, stood Ned. And, as in all crucial moments, the editor and Ned were speaking of the thing least related to their real thoughts. As if wholly unconcerned with the things about them they talked of trout fishing in Wisconsin.

When the telephone rang and the newspaper man responded he turned to Ned again with no excitement in his voice.

"The last form has gone to the stereotyping room," he remarked almost casually.

"One fifty-six," replied the boy outside.

"Correct," answered Latimer. "They 'll be on time."

Three minutes later the instrument called him again.

"It 's off," he announced in a low voice. "We won't hear from them again."

At that instant the wireless operator rushed

from the adjoining room and the coatless and hatless Bob—already in overalls—sprang onto the *Flyer* lower gallery.

"They 've started," yelled both, almost together.

Ned smiled and held out his hand to the night city editor.

"Until we meet again," he said.

"Remember me to the king," was the journalist's only reply as he shook hands and Ned walked slowly toward the mounting steps. Part way to the car he paused, turned and hurriedly retraced his steps. Mr. Atkinson, watch in hand, was approaching from a group of several hundred employees. Ned lifted his cap to the assembled onlookers and then caught the president by the sleeve.

"I don't know that we 'll need it," he said with a laugh, "but I just remembered we have n't any money. Have you a thousand dollars in the office?"

The two entered the office. At six minutes after two o'clock Alan appeared on the upper gallery, watch in hand and an expression of concern in his face. About the same moment Mr. Atkinson and Ned reappeared, the latter carrying a package of bills.

"Don't leave without me," called out Ned, waving his arm to show the money. "I almost forgot; we may have to pay some fines in the big town if we 're arrested."

"It 's eight minutes after two," was Alan's anxious reply.

"Don't worry," called back Ned as he advanced, "feeling" the direction of the breeze with his raised hand. "I 'd rather be a little late than too early. Then, at the foot of the ladder, he turned to Mr. Latimer again. "As I was saying," he continued, addressing the night city editor, "when we get back, if you 'll take about ten days off, I 'll show you the best fishin' spot in Wisconsin."

If those congregated near the airship had the impression that Captain Napier would start with some ceremony or formality they were disappointed. Although Alan, Bob, Roy Osborne and Buck were now on the gallery above, each in some stage of excitement or concern, Ned made his way up the ladder as calmly as if preparing for one of the nightly tests.

His first words aboard were, "Buck, you seem to have less to do than any one else. We 'd better make you purser as well as steward. Here 's a thousand dollars," and he shoved the bills into

the reporter's hands. "Take care of it till we need it. And now a last word to everybody: the rolling and plunging of a vessel on the water is steadiness itself compared with some of the sudden motions the *Flyer* may make; do not pass from one part of the ship to another except when necessary and do not fail, on the galleries or top deck, to keep a hand on the rail. It's a few minutes after two o'clock. All hands stand by their stations for the signal and we'll be off."

Just as Alan and Roy sprang up the store room ladder to reach the pilot house and Bob and Buck were entering the engine room, an employee rushed from Mr. Atkinson's office.

"The *Herald* wants Mr. Latimer," he shouted.

The latter glanced at Ned inquiringly and the boy nodded his head.

"Go ahead," exclaimed Ned. "It's probably an O. K. message for us. We'll wait."

Within two minutes—Ned's associates having once more appeared on the upper and lower galleries with no attempt to conceal their impatience—the night city editor hurried toward the car again.

"From the office," he said in a low tone to the boys above him, for as yet none of the spectators were advised of the mission of the aeroplane.

"They 've just received word that the English government authorities have prohibited airship flights over London during the coronation exercises."

"London—the big London—or just the city?" inquired Captain Ned.

"Over London: that 's the message. The office wants to know if you 'll wait till it talks with the managing editor down at the marine office."

"I 'm afraid it 's too late," answered Ned.

"Two twelve," exclaimed Alan, whose watch had not been out of his hand since two o'clock.

"It 's too late," repeated Ned. "Tell your folks everything stands as it was. We 'll put it over. Are you all ready, Mr. Engineer?" went on Ned. Bob's eyes snapped.

"All ready, sir."

"Start your engines."

As if an electric button had been pressed, first one and then the other big turbine began moving. With neither jar nor noise the circular engines spun faster and faster until the ceaseless, muffled explosions fell into a soft, continuous purr of power. For a few seconds Ned stood at the engine door. Then, with a slight wave of the hand to those standing almost breathless on the ground below, Captain Napier walked forward until he

was beneath the open door of the pilot room above.

"Are you ready, Mr. Hope?"

"Two, twelve, twenty-eight," came from the pilot house.

"You may start at once."

Slowly and gently, like the Alpine pebble that starts the avalanche, the eleven foot "moon propellers" began moving. Taking time to draw on his sweater, Ned hurried aft on the gallery to the companionway leading to the upper gallery and thence to the top deck. As he appeared on this the propellers had already attained a speed that drove the near-by spectators to flight. Then, suddenly, the streams of compressed air began to sing in the terrifying moan of a coming cyclone. As Ned made his way forward on the narrow elevated deck the storm broke; the cyclone burst.

Under the most powerful propellers ever made, the *Ocean Flyer* surrendered. It ran forward twenty yards as if trying to escape the terrific power grasping it, tossed its head sideways two or three times and then, the ingenuity of man annihilating gravity, the heavy airship left the ground. As if falling from a great height, it plunged forward at increased speed. The seventeen hour flight had begun.

CHAPTER XIV

CAPTAIN NAPIER'S NERVE IN MID-AIR SAVES THE CARGO

When Captain Ned, leaning backward over the lower gallery rail, gave the order to start, his eye caught sight of the *Herald* burgee flying from the jack staff above. By deduction he guessed that the *Flyer's* own flag was also displayed. In fact, both had been raised by Bob at the last moment. With a frown Ned had hurried to the top deck. To fly over New York Bay with these emblems prominently displayed in the breeze was a plain advertisement to any observer of the identity of the aeroplane and its connection with the paper. While the airship began to rise to a steadier flight Ned dropped each flag and, without waiting to furl or make them fast, sprang down the ladder again.

"We started two minutes and twenty-eight seconds late," exclaimed Roy as Ned at last entered the pilot room. "To reach the tug we ought to do a mile in forty-four seconds."

"Take it easy," answered Ned. "If they are ready on time, a minute or two won't make any

difference. They can wait. How is she?" he went on in a more concerned voice, turning to Alan who was taking the first trick at the wheel.

"All right," was the only response from the associate pilot, who did not even turn his head, and whose strained expression showed that his mind was on but one thing—the waiting tug and its valuable freight. This first stage of the overseas flight was too short and too low to call for either observation or compass reckoning and Roy, the observer, was standing at the open port door.

"I think you 've got your eight hundred feet," was his sudden, experienced comment.

Alan merely nodded his head, with a quick glance below, and then brought the airship slightly off the southeast breeze. There was a small dip to port, enough to make Ned and Roy "give" in their legs like old sailors on a pitching deck and the starboard door flew fully open. As the craft righted on a level keel again Ned explained:

"Take the lookout below, Osborne, and if we miss, pass the word to Alan at once by tube. I 'll attend to the crane."

"If you don't mind," responded Roy, "I 'd like to take charge of the pick-up, this time at least. Then, if it fails, it won't be because the operator don't understand it."

“Get busy then,” responded Ned, granting the request with a wave of his hand. “When you ’re ready let Stewart pass the word.”

As Roy slid down the ladder into the store room to open the engine room trap door and drop the metal crane into place, Ned stepped onto the port gallery at the bow of the car, from which station he had an unobstructed view below. Their objective point was in sight. Just before them rose the jagged sky line of New York’s skyscrapers. Where these ended on the south, the spidery arch of the big bridge sprang seaward to drop in the less distinct Brooklyn. In spite of the hot, sunny day, a haze seemed partly to obscure the bridge, their landmark, yet it was toward the center of this, dimly to be seen, that the *Flyer* was now headed.

To Ned, Alan and Roy, the sensations that come with a flight at a high altitude were not new. But, to Buck and Bob—although the latter had made a few flights,—the experience was a thing to hasten their heartbeats. By this time the airship was gliding ahead on a level keel, its metal humming in the breeze. As Roy got the crane in place, working through the open trap door of the engine room, Buck got a direct view of the earth beneath. It was only salt marshes and winding waterways

that he saw but they were enough to show him that he was traveling far faster than any limited train had ever carried him.

"We 're a mile high and the ground 's flyin' backward!" he gasped to Bob, who sat with his eyes fixed on the signal board, fuel and lubricator gauges.

"Get out on the gallery," ordered Roy, "and give me more room—it 's crowded here. But stand by to bear a hand when I call you."

As Buck edged to the cabin door and passed into the gallery, Roy dropped his crane and then threw himself on the floor to get an unobstructed view of the region below. Buck, clinging to the frame of the door, had another full view of the world spreading out beneath. Far in the west the Orange mountains rose in green and gray walls, over the tops of which heavy shadows told of unseen clouds and possible rain.

Cities and towns to the north and south, like pawns upon a giant chessboard, were known only by their clouds of smoke, the glimmer of metal roofs and squatty spires. There was no life and the silver estuaries of the sea, winding snakelike in the green of the salt marshes below, confused the eye. To the east the ribbon of the Hudson glistened in the sun while the great city beyond

lost its dull browns and reds in the haze of smoke lying low in the almost breezeless June day.

As the *Flyer* increased its speed, Buck pulled his cap lower. From where he stood on the engine room gallery, the port planes or wings, stretched horizontally over his head far from the body of the car. Swaying slightly beneath the pressure of flight, they sounded a constantly changing note of vibration. Beneath the forward plane the giant propeller caught and fixed his eye. He could no longer make out its blades but the heavy chain drive ran smoothly back and forth with all the fascination of an endless waterfall. Spell-bound, Buck held to the door frame and gazed until a sudden new lunge almost tore his grasp loose.

The sea was almost beneath. New York had risen in the air as if fresh new scenery had been pushed upon the stage. The big ocean steamers in dock at Hoboken and Jersey City lengthened from black lines to port pierced and big funnelled leviathans of the sea. Just to the north, round shaped ferry boats, drifting with the tide, were churning their way back and forth across the river. Then the great sky craft dropped once more. All the world seemed rising as if to meet the speeding aeroplane. Buck grasped the door and with the other hand caught the gallery rail.

"Stand by," came a sharp command from within the cabin. Although holding to the ship with both hands in his new alarm, Buck had sense enough to realize this meant him. Scarcely knowing how he did it, the young reporter got into the engine room.

"Aye, aye," he responded rather feebly. Just then the *Flyer* tilted still further forward. It had reached New York harbor and its vigilant pilot was now preparing to pick up the waiting cargo. Buck saw the gently heaving tidewater as he took his post. Had either Roy or Bob looked at him they would have seen a sort of pallor creeping into his face. Bracing himself against the downward dip of the car Buck awaited further orders—his teeth set and his lips compressed as he fought his first attack of "skysickness."

"All right," came suddenly through the speaking tube—the prearranged signal to Roy—and before Bob could repeat it he saw the speed indicator begin to drop. The *Flyer* was gliding toward the water and Roy's head sank lower through the open space. On the upper forward gallery, Ned stood with a pair of binoculars in his hands. He had moved back opposite the open pilot room door. Ned made neither suggestion nor comment to his chum at the wheel. But, with

a busy glass, he swept the opening of East River now dead ahead.

"See her?" called Ned when he first made out the "Fanny B."

"In mid-river?" answered Alan.

"With a small black boat lying alongside," continued Ned.

"Make out her two black-banded stacks?" asked Alan.

"And the signal too," announced Ned. "She has a white flag at her stern."

Alan made no reply, as these marks were not yet distinguishable by the naked eye. Yet he headed toward the craft in the middle of the river.

"I got her," he exclaimed at last, giving the signal of caution through the tube at this time and beginning to decrease his speed. "She 's headin' with us. Make out any one aboard?"

"Quite a bunch," reported Ned without lowering his glasses. "Most of 'em on the roof of the engine house. There are two persons well aft standing by the hawser run in the stern."

"Better come in and catch the time we pass the Battery," suggested Alan and from that time he gave no more heed to his companion. Ned saw that the powerful ocean tug had already advanced some distance up the river. This made no differ-

ence in their plans so far as the catching of the cargo was concerned. But it did in another way, for their calculations for time and their latitude and longitude made the Battery their real starting point. In a moment he was at Alan's side with the chronometer before him and his eyes looking through the port door.

Captain Ned knew that the tug was rising and falling just ahead and stern on. He had seen the black-hulled *Herald* despatch boat veer off as if for a better view of what was to come. He thought he made out the figures of Major Honeywell and the managing editor standing apart in the stern. Then, like the painted panorama he had once seen of "Departure from New York harbor," the old, round, familiar Battery in its little setting of green flashed into view.

"Two, twenty-one, seventeen," exclaimed Ned and once more he disappeared through the starboard door. All was now so plain that Ned almost shrank back. As if shooting at a target, Alan held the airship directly on the rapidly expanding mark. One less familiar with the young aviator's skill could have seen nothing but disaster ahead. In a constantly lowering curve the *Ocean Flyer* seemed doomed to an inevitable collision.

There was a frightened scurrying on the tug. Those on the engine room roof were scrambling to the deck. The two men in the stern were waving their arms. But the cool-headed pilot had no eyes for these. Between two slender spars hung the rubber encased package of matrices that twenty-one minutes and seventeen seconds before, had come hot and steaming from the stereotyping room of the *Evening Telegram*. It was Alan's business to pick up these paper forms and in seventeen hours carry them to the heart of London on the other side of the world.

The skill with which he laid his nerveless hand to this task meant the possibility of success or immediate disaster. To fail in his course by inches meant the wreck of all their cherished hopes and possibly the death of five persons. To Ned, on the gallery without, peering downward and crouching forward as rigid as bronze, the strain was no less. And yet, he remained silent. What one could do, two might not. Nothing of his own skill was missing in Alan. He rested his own fate, that of his companions and that of the great machine, in the hands of Alan and waited.

At the precise moment when the still rapidly moving airship seemed about to drop into the spray of the choppy waves—when, in fact, the

lowered arm of Roy's crane had already touched the water—there was a sudden movement for which only Ned and Roy were prepared. As Bob stumbled against the signal box and Buck's weakened legs gave way beneath him, the propellers shot into high speed and the chug of the compressed air valves told that the big planes had been altered violently. There was only the hint of a check in the downward sweep of the aeroplane and as a din of cheers sounded ahead the birdlike *Flyer* sprang forward on a new course.

Alan, driving the ship, could not see at the moment of contact the object he was to pick up. Nor was Ned able to keep his eye on the waiting package. Roy alone of those on the aeroplane was in a position first to detect success or failure. From the instant the hurtling machine jumped on its upward course the tug and its masts disappeared from Alan's sight. But all this was carefully calculated. It was easier to clear the tug's masts with a lifting tail-piece than it was to avoid them on a downward swoop. But, more important, the checking of the swift flight for a moment put the aeroplane over the tug masts at a lessened speed.

There was no time to examine the persons on the tug. Like a moving picture, Alan and Ned caught a glimpse of the major and the newspaper

man. The latter seemed to be calling, for his hands were at his mouth. But no words reached the aviators. A cloud of steam burst upward like the discharge from a gun and Alan's last view of the boat beneath made out the face of the tug pilot as the man thrust his head from the small pilot house with one hand inside yet grasping the wheel. Ned saw these things but as he clung stoutly to the rail his eyes also swept the river ahead. For a second his thoughts left the question, "Would they pick up their valuable freight?" Before he could even realize a new fear that suddenly possessed him, there was a shock and the *Flyer* threw its bow downward.

But the momentum of the machine and its altered planes acted as rudders. The dart seaward died almost instantly and the airship rose again on its upward course. With the shock had come a strain and then Roy saw the tug beneath him dip by the bow while the two masts bent forward under a heavy strain. The "pick up crane" had done its work but the spring hook on the starboard mast held until the strain of the pulling airship tore it loose. While it held, the powerful car veered to the right and then, as the hawser between the masts tore itself free, there was a new crash, a new shock and the *Flyer* cleared the bobbing tug beneath.



PICKING UP THE MATRICES.

"The engine room!" rang out in the pilot room and Ned, balancing himself securely, sprang into that apartment. "The engine room!" cried Alan a second time. As he moved his head toward the hanging speaking tube, Ned understood and slid down the ladder into the store room. In the engine room he found Roy and Bob bending over the trap door opening. Near them, steadying himself against the wall of the compartment, was Buck—his face ashen and the picture of despair. Buck pointed feebly to the opening, almost blockaded by Roy and Bob.

"Jammed," panted Roy, his face red with exertion, when he realized that Ned had arrived.

"She came back in the crane so hard," explained Bob, breathing quickly, "that we can 't get the bundle loose."

Ned threw himself on the floor and got a look below. The compact bundle of matrices, enclosed in waterproof oil cloth, had been caught by the crane and, as planned, had been shot up into the narrow V of the crane. But it had traveled with such speed that the metal arms of the V had sprung and were now closed on the bundle with a grip that the two boys could not loosen. While attempting to do so Roy had also been forced to maintain a hold on the cord holding the V point

of the crane up against the car opening. To loosen this meant that the crane would drop many feet below the bottom of the airship and that the valuable package might be dislodged and lost.

Without comment or inquiry Ned plunged into the store room and almost instantly reappeared with the light but strong rope landing ladder. The end loops of this he snapped into two rings on the engine room floor and while the passengers on the now fast receding tug on the river beneath could yet make out the details of the rapidly ascending airship, they saw what seemed to be a rope drop suddenly through the bottom of the aeroplane. Then they saw a figure crawling down the rope. It was Ned on the swaying rope ladder. When this nervy young man crawled through the door and risked his life on a few slender strands, it was to make fast a line on the wedged bundle. He could only work with one hand but he had done the same thing on a dirigible balloon and there was no nervousness to delay him.

"All fast," he shouted after a few moments and Bob and Buck hauled away on the line. And they were just in time. Roy was nearly exhausted. As the new line took the strain off him and Roy straightened up to rest, the deep impress of the crane cord on his hand showed the

weight he had been sustaining. But Ned's work was not done. Still hanging to the fragile, swaying ladder, he tugged at the caught package until at last it began to move toward him.

"Stand by up there," Ned yelled again. "All take a turn on the rope—she 's comin'."

With another violent jerk the package came loose, slid forward on the crane and struck Ned's legs. The hanging ladder flew forward while Ned caught himself with hands and legs and the bundle dropped free, swinging wildly back and forth. Twice, the human, swaying target was struck by the plunging package while Ned hooked his legs and arms desperately around the ladder, and then those in the engine room managed to draw the whirling parcel up to the trap door. Quick hands grasped and dragged it into the car.

The precious packet safe, Roy turned to assist Ned in mounting the ladder and re-entering the cabin. One glance and a frightened cry came from him. There was no one on the rope ladder. Ned had disappeared.

CHAPTER XV

IN WHICH NED'S LIFE IS SAVED

While Roy's wild cry of alarm yet filled the engine room, other words broke on the ears of the dazed boys.

"What 's the matter with Ned!" came in a shriek through the pilot room tube.

Bob was already at Roy's side, crowding the trap opening in gasping alarm. Nearly 2,000 feet below them the haze of Brooklyn thickened into a cloud. Sweeping backward in the rush of flight the empty rope ladder told of their companion's fate. The "sky sick" Buck seemed desperate. Weak and trembling as he was, the tragedy that seemed to paralyze Roy and Bob galvanized him into action. Forgetting the illness that was on him, he pushed Roy and Bob aside and forced his head through the door.

"All right, old man; you 're all right!" heard the boys in the car. "We 'll get you in a second; you 're safe; keep your head. He 's all right," shouted Buck drawing his head into the car. "He 's in the crane; he 's all right; it 's safe;

it 'll hold him. Get a line," he went on, breathless but cool and determined now. "Get a line—quick!"

"Hurry up here," came a second agonizing cry from Alan in the pilot house, "some one! What 's the matter? Quick."

"He 's all right," yelled Bob in answer. "He 's on the crane. We 'll have him in a minute."

"Send Roy here," came back instantly. "Quick!"

His pallid face yet stamped with fear, Roy understood. He was the only one to take Alan's place. Without even a look below he rushed into the store room and up the ladder. Almost before he grasped the pilot wheel Alan had dropped to the deck below. But he was not quicker than Bob and Buck. The latter's feet were already through the trapdoor and on the ladder rungs. From its hook on the port gallery just outside the engine room door, Bob had caught up one of the buoy life lines. It was fragile looking but tested to 750 pounds. Bob did not yet fully understand the situation but he had acted instantly on Buck's orders.

"The line!" came again from the young Kentuckian, one of whose hands could now alone be seen. As Buck's fingers grasped the rope Alan tumbled into the room.

"He 's on the crane," panted Bob.

"Come back, let me down there," shouted Alan dropping over the trap.

"Pay out that line," was Buck's only answer. "Gimme me more of it."

"Don't try that," yelled Alan anew as he tried to grasp Buck's swaying body, "I 'll do it. Come up!"

If the tense Buck heard these injunctions he gave no sign of obeying. The tenderfoot who, five minutes before, had been writhing in the miseries of "sky sickness," was now clinging to the swinging ladder with his feet and his left arm. With death defying recklessness he did not even grasp the rung of the ladder with his hand. His left arm thrust between two rungs, he was using his left hand and his free right hand to draw the life line through the trap and coil it in a loop. Then, catching the circles of the line in his right hand, he grasped a ladder rung with his left and balanced his body to cast the coiled rope.

"Stop! Stop!" called Alan again. "Wait till we get a rope around you."

But Buck seemed deaf to appeal or command. He had thoughts only for the figure beyond him swinging helplessly back and forth, caught on the long, pendulumlike crane. With each movement

of the airship the twenty foot metal arm swung forward and backward as if to shake Ned from his hazardous hold. And with each swing of the fragile crane, the spidery ladder and Buck moved back and forth like a shadow. Cold with fear, Alan and Bob were helpless. To follow Buck on the ladder was impossible.

"Make a landing," cried Bob hoarsely. All had happened so quickly that no one had even thought of this. "Hold on," he yelled through the door, "we 're goin' down."

Alan was already at the tube.

"Put her down," he screamed, "or they 'll both be killed. Quick! Put her down—in the water!"

He sprang to the pilot house ladder and then stumbled back and threw himself on the floor at the door. The panic that had seized him and Bob was lessening. His muscles still numb with sickening fear, his mind had begun to work.

"Another line," he panted to Bob, "the star-board buoy, Stewart," he added quickly, "don't throw till we make you fast. Wait!"

But the reporter gave him no heed. Buck, who had not yet cast his life line, hung poised like a cat.

"Keep your nerve, Ned," called out Alan

hoarsely, "we 're goin' down. We 'll get you in a minute. Hold on!"

The boy hanging between life and death, made no response. Alan, his head through the trap, saw that Ned had no thought but for Buck and the coiled rope. He seemed not to hear the words meant for him. Then Alan saw for the first time that his chum's lips were set. His face was distorted as if by pain.

"Hurry!" shouted Alan again as Bob threw an end of the starboard buoy line from the gallery. Even Roy in the pilot room above, despite the vibration of the planes and the noise of the engines, heard the cry. It was needless so far as he was concerned. From its height of nearly two thousand feet the *Flyer* was already on the first downward sweep of a huge spiral.

Grasping the new line Alan prepared to lower it to Buck. He had quickly doubled it for added strength and was looping it to drop over the nervy reporter's head and arms when the *Flyer's* first dip was felt. With the first sensation of it Alan was at the tube.

"Stop! stop!" he yelled, "or they 'll both be lost."

When the bow of the car dropped, both the crane and the ladder swung forward violently.

The metal to which Ned was clinging in apparent desperate pain, dropped far below his would be rescuer and both Ned and Buck grasped their fragile supports anew.

"Don't!" shouted Buck. "Don't! Keep her up. I 'll get him. Don't do that."

For the first time Ned spoke. Far forward and low beneath the car, he looked up and caught Alan's eye. First, he shook his head while he seemed almost to groan with pain.

"Even keel—" he began and then stopped. Alan saw him, gripping his steel supports, vainly attempt to raise his body. One of his legs was free. The other was between the narrowing arms of the V. It was caught as if in a vise. While this had saved the victim from instant death, every dart or movement of the flying car wedged Ned's leg tighter. With Buck's words in his ears, and the sight of Ned's predicament before him Alan sprang to the tube once more.

"Stop her and hold her!" he called, his voice husky with a return of sickening apprehension. "Level and steady!"

Bob now had the looped line which he extended in vain for Buck's use. The reporter on the ladder neither looked above nor gave attention to the rope that might safeguard his position. The

swaying crane and ladder had lessened their sweeping flights and Buck had gripped his coil anew.

"Here she comes!" he shouted suddenly. "Look out!"

With the words he cast the loops of the line toward the still moving crane and Ned. The latter's left arm shot toward the circling line but the rope fell short. At the same instant Roy in the pilot room shifted his planes; the car came on a level keel and the crane and the ladder again swept forward in a nauseating sweep. Alan was desperate. Speechless and ashy white he pushed his feet through the trap as if to join Buck on the dizzily bobbing ladder rungs.

"You 're crazy," shouted Bob. With all his strength, Bob caught the distracted Alan by the shoulders and hurled him to the floor of the engine room. "You can 't do that," he panted. "You 'll kill Buck and yourself too. Buck 'll get him. Buck," he called anew, putting his face to the opening again, "put this line under your arms before you try again."

As before, there was no answer from Buck. The gritty reporter had taken his old position—his left arm between the ladder rungs—and was again coiling his line. Alan had drawn himself

to the opening and lay beside it as if dazed. The giant car was now horizontal—shooting ahead with meteorlike speed—but without a jar and almost without vibration. Where they were, not one of the boys knew or cared. Even Roy above, with his gaze riveted on the compass, had only thought and ears for what might be happening below. To leave his post meant certain death for all.

“Here she comes again, Ned!” sounded once more from beneath the car.

“He ’s got it; he ’s got it,” cried Bob almost hysterically as he clasped dazed Alan by the shoulder. “Brace up, old man—brace up. You ’ve got to help now. He ’s all right—brace up.”

Just as Buck had forgotten his illness in the sudden crisis, Alan now rose to the emergency. Sick at heart as he was, he again threw off his nervousness and almost forced Bob from the aperture. One look at Ned made him doubly ashamed of the condition that fear had wrought in him. The steel-nerved Ned, though racked with pain—with nothing but a slender steel bar between him and certain death—had already taken a turn of Buck’s line around the steel uprights between which he was caught. At that moment he was

passing the free end of the light cable about his own body beneath his arms.

The three pairs of eyes that watched every movement needed no signal to tell them when the suffering boy had done all he could. One glance by Ned said plainly enough: "Do what you can to save me." Then his rescuers saw him grip the steel anew and close his eyes.

The first strain of his efforts at an end, Buck now seemed almost incapable of further effort. He held his end of the line above his head but it did not quite reach the outstretched arms of Alan.

"A little more," urged Alan, "careful now; a little more!"

As if the panic of fear had at last reached him, Buck looked up in silent appeal.

"Shut your eyes. One foot at a time," went on Alan. "You 're all right."

Slowly, as if his body weighed hundreds of pounds, Buck's foot arose to the next rung. Hampered by the precious line, which he must not lose, he drew himself up a step. Again and again he repeated the effort—the perspiration standing on his forehead—until, at last, his trembling fingers got the rope to Alan's low reaching hand.

"Had n't I better stay here and guide the arm?" almost groaned Buck.

Both boys above saw the impossibility of this. Stewart had done his work. They knew he could do no more.

"Come on," urged Bob hoarsely. "You 're doin' fine. Easy now. We need you up here!"

Twice more and the weak Buck was within reach of the boys in the cabin. Together they caught his shoulders and almost lifted him into the cabin.

"Right," gasped Buck, "we 're all needed—here. I—" and the exhausted reporter rolled over on the floor. The trap-opening clear of Buck's form Alan looked below once more. Ned, his eyes yet closed, was waiting for the effort that meant life or death to him.

"You 're all right, old man," called Alan reassuringly. "Keep your nerve and you 'll be with us in a second. Hold tight. All ready."

"Can we do it?" whispered Bob as the two boys braced themselves for the strain that was to draw the crane back in place.

"We 've got to do it," was Alan's reply. "And the line must n't give an inch. I 'll draw in and you take a turn each time around that deck post—" pointing to a metal upright about three feet astern of the opening. "All ready!"

With one foot against the inside edge of the trap door aperture and the other beneath him, Alan and Bob, the latter with a single turn of the line about the deck post, and his feet against it, both lay back on the first heave of the cable that meant so much to all of them. While Alan held the first hitch steadily for Bob to take up slack, a form crowded close behind him.

"I 've got it," said a low, weak voice in Alan's ear. "Get a new hold. I 've got it," and Buck Stewart came once more to the rescue.

With Buck's help the line came in slowly, hand over hand, until, suddenly, the opening was darkened by Ned's body. Another heave to bring the silent form close to the trap and Alan, panting with exertion and his arms trembling, whispered:

"Make fast, Bob! Hold her, Buck."

When he felt that the line was secure he released his hold and without a word to Ned, who seemed only partly conscious, Alan slipped a double thickness of the other line about his chum's body. Almost with the same motion, he caught the short cable on the end of the crane used to hold it in place. There was a heavy belaying cleat just outside the opening, attached to the bottom of the car and on this, with a few swift turns, he made fast the crane cable. All this time Alan had

been gripping Ned's coat as well as he could with his disengaged hand. Then he realized that the prisoner in the V had spoken no word.

"Both of you on the line," the fear stricken Alan shouted as, with both hands now free, he threw his arms about Ned's body. Almost lying on the lower arm of the pick-up contrivance and tightly grasping the upper arm, as Alan attempted to lift him, Ned gave no sound save a groan. His leg yet held in the viselike narrowing arms. Driven to desperation Alan thrust his own legs through the trap opening and, catching the rope ladder with his feet, wriggled his body past the inert form of the boy just below. Releasing his hold on Ned only long enough to get an arm between two ladder rungs, he anchored himself on the slender support and with both arms again caught helpless Ned about the waist.

"Keep the line tight," he cried. "Don't let it give."

Buck and Bob knew well enough what this would mean. They saw at once that Alan was about to pull Ned's body backward from the clutches of the steel arms. If he freed the boy and Ned should drop only a few inches, the fall might tear the line from their grasp. If not that, the shock might easily hurl Alan from the ladder.

The boys in the cabin drew on the line until the victim at its other end groaned again.

“Now!” muttered the rescuer on the ladder. One pull and Ned shrieked with pain. But the anguish that this carried to those above and below him did not lessen the grip of Buck and Bob or deter Alan.

“Again!” came from Alan as he threw himself backward, Ned’s waist in his arms. The body of the suffering boy slid forward on the steel arm, only an inch or so, but so quickly that Alan had to cling to it to keep from falling. The leg released at last, Ned’s body turned sideways. The almost unconscious boy grabbed mechanically at the steel arm below him but Buck and Bob, with all the muscle in them, acted as quickly. The middle of Ned’s body rose upward as Alan released it and caught in turn the steel arm himself. With one pull the almost helpless Ned was drawn to the door and while he hung there, Alan sprang up the ladder. But, before he could give further assistance, the strong grip of the boys in the cabin had drawn their commander to safety. The same hands also caught Alan as his head reached the opening, and the fight was over.

On the floor, with his eyes closed, lay Ned. While Bob slammed fast the trap door, Alan

sprang to the tube, breathing hard and supporting himself with the deck upright.

"It 's all right, Roy; we 've got him. The course is straight up the sound. Head away."

Then he rushed to his chum's side. Buck and Bob were already loosening Ned's clothing. Alan caught his hand and began chafing it.

"You 're all right, old man," he exclaimed, rubbing the prostrate boy's hand.

Ned opened his eyes, groaned and then closed them again.

"You 're safe—in the cabin," announced Bob.

"Thank you," answered Ned weakly. "My leg?" and he moved his arm toward his right leg.

Bob ran his hands over the injured member and lifted it, despite Ned's groans.

"It is n't broken," he announced. "It 's only bruised."

"Then," said Ned suddenly as he fully opened his eyes, "every one to his station. I 'll be all right in a few minutes. Keep the ship on her course."

CHAPTER XVI

AN UNEXPECTED TRIBUTE

Alan gave little heed to these words. If Ned had sustained a severe injury the flight of the *Ocean Flyer* would come to an end at once. When the boys had removed his clothing, the first sight of the rescued boy's leg was alarming. Midway between the knee and the thigh of the right leg there was almost a complete band of red bruised flesh, the indentation so deep and vivid that it resembled a cut. But the skin was not broken and there was no blood.

"It 'll be sore," explained Bob; "good and sore. But there's nothing to be scared about." This he explained to the exhausted Ned. "And, with a wash of alcohol, a little massaging and rest," he concluded, "he 'll be all right in a few hours except for a limp."

While the boys washed and applied a light bandage to the bruised leg Ned told what had happened.

"Your 'pick-up crane' is a frost," he attempted to call above to Roy in the pilot room as

his spirits returned. "At least, it 'll have to be improved. It catches all right but it holds too good."

"Too good?" laughed Alan who was already bringing circulation in Ned's stiffened leg with gentle rubbing. "I reckon it was n't 'too good' for you. If it had n't held as it did you might have been ornamenting some Brooklyn church spire by this time."

"Any way," persisted Ned, "unless it is changed so that it releases its prey easier, we 'll have to add a platform below to carry an extractor. A rope ladder is a little risky for that work. I 've had enough."

"The crane fell and hit you, I suppose?" suggested Alan.

"It did," answered Ned, "although it was all done so quickly that I did n't get the full details," and he laughed feebly. "When you fellows grabbed the package I let go and braced myself on the ladder to get my back under the bundle. While I was doin' this something gave my legs a wallop. The crane had got loose and it fell. I was only payin' attention to the ladder and the crane made a sneak on me. Anyway, the next thing I knew, to keep from fallin', I had grabbed the crane and, talk about your trapezes! I made a swing with it that was a wonder."

"That 's when I saw you," exclaimed Alan. "I was just gettin' the machine on her course up the Sound when that crane swung out in front of the car. I ain't over it yet. You were n't graceful and your hair was flyin' but you were stickin' all right."

"When I went out the first time," went on Ned, now recalling the details of his horrifying flight through the air, "I was holdin' on to the arm of the crane. But it was smooth and I could n't stick. I had to slide down. When I got to the bottom my leg was inside."

"It 's all that saved you," repeated Alan.

"It 's the closest call I ever had," went on Ned. "I hope I did n't delay things—much. What time is it?" he asked suddenly as he lifted himself into a sitting posture. Alan looked at his watch and then called to Roy, through the tube, for chronometer time.

"Two, thirty-three, thirty-five," came the instant response.

"We passed the Battery at two, twenty-one, seventeen," said Ned, calculating. "We 've been on our way twelve minutes and eight seconds. Are we on the course, Alan?"

"What 's the course, Roy?" called Alan again.

"Northeast by East one-half East," came the sharp answer.

“Good,” exclaimed Ned. “And what are we doin’ in the way o’ speed?”

“To tell the truth,” laughed Alan, “we ’ve been just a trifle busy down here and Roy has been alone. I have n’t made an observation since we left. But we ’ll know in a few minutes. Norwalk is only forty miles out.”

Without immediate reply Ned began to get on his feet. He did so at last and by leaning on Alan was able to stand. Suddenly he caught his chum’s shoulders.

“Now,” he exclaimed, “I remember what was on my mind! I ’ve been tryin’ to remember it ever since I made my swing for life. When Roy called for help down here I was watchin’ Brooklyn bridge just ahead of us. Did you go under it or over it?”

“Over it. Why?”

“I knew we were so close to it that I was afraid you could n’t get up quickly enough. And then, just when I figured out that you ’d go under it, those Sound steamers and tugs showed up.”

“I had to go over,” explained Alan, “but there was n’t much to spare. It took all our surface and a sharp lift. But we made it.”

Ned was now standing in the store room door with a hand on the pilot ladder. Suddenly his

face changed and livened up as if he had just taken a plunge in his morning tub."

"Boys," he exclaimed, "I reckon I 'm a fine example of selfishness. Buck, and you too Bob! I reckon you 're thinkin' I 'm goin' to write you letters to thank you for what you 've done. I 've pretty near made a failure of our start and I 've put you boys where you had to take big chances. I 'll have to be pretty good the rest of the trip. I won't say much to Bob because he knows. But Buck, you 're all right. Gimme your paw!" As Ned tried to walk to Buck's side he limped and would have fallen had not Stewart caught him.

"You know why I did what I did?" laughed Buck. "I did n't know what I was doin'. I was crazy, out o' my head from 'sky sickness.' I never knew where I was nor what I was doin' till it was all over. And then I flunked."

"You got scared when you 'd done the trick," exclaimed Alan. "And if you were crazy when you did your lariat act, I 'd like to see you in action when you have your senses."

"Right," exclaimed Bob, slapping Buck on the shoulders. "Old top, you 're a brick. You 're It and you belong. That 's all I 've got to say except that we 've all lost a lot o' good time not knowin' you sooner."

“Were you sick?” broke in Ned. “Sick from the motion of the car?”

“I certainly was,” replied Buck. “Good and sick.”

“And how are you now?” went on Ned sympathetically.

“I guess it ’s like hiccoughs. You must have scared it out of me. I ’m fine.”

“You ’re all right, Buck,” exclaimed Ned, catching the reporter by the shoulders anew. Bob ’s right. I hope you ’ll stick to us. And you ’ve got a big credit with me. But now, why don’t you subordinates follow instructions? Did n’t I order you all to your stations? Get busy. We ’ll talk this over when we ’ve got time to spare.”

Bob laughed, saluted and hurried aft to the purring engine. Buck looked about for a moment in an embarrassed way, having no specific duties, and then, his eyes falling on the life buoy lines lying tangled on the floor, he fell to getting them in order. Ned, stumbling to the ladder with Alan’s assistance, was about to draw himself up when he paused.

“I ’ve just thought of it,” he remarked with a smile. “Major Honeywell and the *Herald* must have thought us a jolly lot.”

“Why?”

“From what I can recall, there was n’t an answering hail or a parting salute from the *Flyer* when she passed over the tug. Was there?”

“I guess you ’re right. I did n’t see it after I got the crane on the line. As a matter of fact,” continued Alan, “I have n’t had a look below since we picked up the baggage. I don’t know how high we are nor what is below us, land or water.”

“In that case,” said Ned, drawing himself slowly up the ladder, “after we passed, it must have looked as if the *Flyer* had no one aboard. We should have dropped a message or waved a handkerchief or dipped our colors. By the way,” he added, “the baggage is all right I suppose? Where is it?”

“Buck,” called out Alan, “stow that package away safely. It ’s a valuable bundle.”

As Ned drew himself stiffly into the pilot room and Alan was about to follow up the ladder Buck called to him.

“There ’s two bundles. One of ’em is nearly loose.” Alan dropped back and stepped into the engine room. For the first time he examined the carefully wrapped parcel that had nearly cost Ned his life. Lashed to the stout cords tied

around the big bundle was a small, oblong paste-board box—now crushed and flat.

“Looks to me as if this is what caused the trouble,” commented Alan as he cut the strings holding the small package and saw a deep mark across the box’s top where the arm of the crane had undoubtedly cut into the extra package. As the broken box fell apart, a bunch of crushed and torn roses fell to the floor. The box bore the name of a well known New York florist who caters to the steamship trade. Among the fragrant fragments was a waterproof envelope in which Alan found a card. It bore his sister’s name, “Miss Mary Hope.” And, written in a small hand above this, the words: “To the crew of the *Ocean Flyer* with my earnest wishes for a safe voyage.”

In spite of the smile on Alan’s face there was a little thickness in his voice when he tried to make a joke of the affair to Bob and Buck.

“I guess she really meant ’em for Ned and you,” said Bob, “but I ’m goin’ to take her at her word. She ’s been thinkin’ of this for a long time. It kind o’ sets me b̄ack. But it ’s like her. She ’s a dandy, Alan.”

There was a sudden sound at the speaking tube.

“Hurry along, Alan. Roy ’s got to get at his work. Tell Buck to rig up something for me to sit on. Get a move on you!”

"In a minute," replied Alan, chuckling. "We 've just found a box of flowers tied to the big package."

"Flowers?"

"Yes. Roses for the crew of the *Flyer*."

"From the *Herald*?"

"Got Mary's card in 'em."

There was no response but a scrambling on the metal floor of the pilot room and a sight, through the open store room door, of a pair of legs on the ladder made all the boys smile.

"Don't come down," shouted Alan. "I 'll bring 'em up. We 've got too much to do to be botherin' with flowers."

As Alan smiled, crowded the fragments of the blossoms back in the crushed box and hurried away, Buck looked inquiringly at Bob.

"Sure," said the latter with a wink. "You bet your life. Bad too."

In the pilot room there was not much time for admiring flowers. With a slight blush and a few words of appreciation both boys gave quick attention to the car, its course and the work before them. The Sound bridges and even the tallest of New York's skyscrapers had long since disappeared. Quick glances at the land and water beneath and at the compass showed Ned and Alan

that Roy knew his business: he was on his course to the fraction of a degree and he was keeping close to the two thousand foot level as directed.

Over the operator's table hung Course Chart No. 1. On this the distance between the Battery in New York harbor and Ipswich, Massachusetts, was set down as 187 nautical or 215 land miles. And the first leg of this course ended at South Norwalk on the Sound. The true course by compass to Ipswich was N. 51° E. But, with a magnetic variation of 11 degrees W., this made the magnetic course N. 62 E., or, by compass points, N. E. by E. ½ E.

Roy repeated his direction, his estimated height and the time by chronometer.

"Very good," answered Ned. "Keep her so."

Then he seated himself at the operator's table and, for the first time, made use of the tables prepared by their office calculator.

"It 's hardly worth while," he explained to Alan, "since we 're in sight of known landmarks, but I want to see how it comes out."

He noted the automatic register of the anemometer for speed, averaged this for speed per minute since they started, deducted the loss in forward flight caused by the quartering southeast breeze as set down in their calculated tables and

then figured the actual flight. When he had done this part of his work he frowned.

"Two miles a minute," he exclaimed. "Pretty slow."

"It is," explained Roy, "but it is n't a fair test. I was down to three-quarters speed during our little unpleasantness and we lost time pickin' up the package and gettin' up over the bridge. I 'll keep her there till you pass over Norwalk so you can check her speed."

"It 'll be beneath us in less than five miles," announced Ned. "My figures were made at two o'clock, thirty-eight minutes and forty-seven seconds. We were seventeen and a half minutes out and had done thirty-five miles. Beyond Norwalk we 'll have to hit her up. If we can't do three miles a minute we may as well call it off."

"When 'll that bring us to Ipswich?" asked Roy. "Here 's Norwalk," he added quickly.

Before he joined Roy and Ned for a look at the brisk Connecticut town with its factory stacks, long fishing wharfs and deep river harbor, Alan made a calculation himself to answer Roy's inquiry.

"We 'll cover the distance to Norwalk by two forty-one o'clock. From there to Ipswich it 's one hundred and seventy-five miles. If the *Flyer*

has a three mile a minute gait in her, that 'll take us less than an hour—fifty-eight minutes and twenty seconds. We 're due at Ipswich and the ocean again at thirty-nine minutes and twenty seconds after three o'clock. Call it three forty to be safe," he added laughing.

"Got your land chart ready?" asked Ned.

"Everything is in place," answered Roy.

"Alan," exclaimed Ned, "take the wheel and finish your trick. Roy, you had better begin your observations and log. Norwalk is just below us. Take your station and give your orders."

Each boy sprang to his work, Alan to the wheel and Roy to the desk. As Alan saw the little city spread out beneath him, 2,000 feet below but sharp and distinct in the now clear, sunshiny June mid-afternoon, he reported:

"Town beneath; two, forty-one, seventeen o'clock and the course is northeast by east one-half east."

"Make it so," responded Roy instantly. Then he entered the time on his log and went through the form of checking the course. "Steady ahead and keep a lookout for town of Derby, twenty miles. Landmarks, red water tower north of town and small park with two cannon near center of town."

"Aye, aye," was Alan's reply and the new watch was set.

"I 'll take a look over the ship," said Ned. "Give her all she 'll take. It 's full speed from now to the end."

Stepping out into the gallery the young commander sighed. Able to walk only with difficulty he stationed himself near the instrument case and the aerometer. As the wind cups of this flew faster and faster he watched them as if fascinated. He knew from the gale pushing against him that their speed was increasing. Then he hobbled back into the pilot room and stood by the speed register. It had increased to two and one-third miles a minute. Never had any other man driven vehicle passed through the air at that speed. But it was not enough. Slowly, the indicator arm trembling, the needle reached a shade over two and one-half miles and then paused.

"Is that your best?" asked Ned calmly and slowly.

"She 's got it all," responded Alan, his eyes on the compass binnacle and his hands gripping the rudder wheel.

"Very good," answered Ned as if in deep thought, "hold her to it."

CHAPTER XVII

WHAT HAPPENED AT THREE FORTY-THREE P. M.

The pilot room of the *Flyer* contained no loose furniture. The only chair was that at the observer's desk. When Buck appeared with a camp chair for Ned—one of those stored below for use in the state rooms on the return trip—Captain Napier laughed.

"I meant something that I can use at the wheel," he explained. "I 'll be takin' my trick at the wheel at six o'clock. See if you can 't fix me up a stool."

Buck hurried away and Ned limped out into the gallery again. The responsibilities of command-ership had at last begun to worry him. The *Flyer* was not making the speed he had planned. Something had gone wrong. And if the trial trips and calculations had not deceived him, it was something to be remedied at once or the great experiment was a failure before it was made. In its trials the monster airship had attained a speed of three miles a minute. Crawling to the door of the first stateroom Ned entered and seated him-

self on the cot. In his note book he turned to the pages of figures he had made, erased, added to and revised for a week.

From New York to Ipswich was 205 miles. From Ipswich to Fogo Island it was 787 more. Nothing was plainer than the total of the sailing courses from Fogo Island to Galway in Ireland, 1709.1 miles. Adding that and the three hundred and forty-nine miles between the Arran Island lights in Galway Bay and London there was a voyage of 3050.1 miles to be covered. Checking these figures again Ned shook his head.

“We ’ll even have to beat three miles a minute by a fraction,” he said to himself, beginning a new calculation, “and we ’re doing only two and one-half a minute. At that rate it ’ll take us twenty-one hours and thirty minutes to sight Hyde Park. Add to that, five hours for corrected time goin’ east and we ’ll eat up over twenty-seven hours. Let ’s see,” he added, making an addition. “That means we ’d land fifty-one minutes and a fraction after four o’clock to-morrow afternoon—practically five o’clock. A fine time for our paper to be issued. And that is n’t the worst. If we started back in an hour it ’d take us as long to reach New York. Even subtracting the five hours in time we gain, we ’d reach New York sixteen

hours and thirty minutes later. That means, leavin' London at six P. M., we 'd get to New York at half past ten the next morning. We can 't loaf along at that rate. We 've *got* to do one hundred and eighty miles an hour—and better!"

He jammed his book into his pocket and started painfully toward the pilot room. On the gallery he paused a moment to look over the *Flyer*—hurling itself like a comet toward the distant sea—and at the panorama beneath. So great was the nervous tension of all on board and so insistent were the duties of each that hardly a moment had been given to this picture. Ned saw it all but his mind was not on it. Even as he looked, his alert ears were strained for the rhythmic beating of the propellers and the low note of the vibration of the mammoth planes. But his thoughts were, "Three miles a minute or better; three miles a minute or better."

Yet, he could not fail to notice the town-spotted earth, its web of roads and railroads, moving specks that might be people walking or motor cars—at the speed the great aeroplane was flying there was no comparison of speed with objects below, and even express trains seemed standing still. Colors played before his eyes; the em-

erald green of fields, endless ribbons of chalky white roads. The great black bat moving over towns and fields he knew to be the shadow of the airship. Far to the north the mountains of New England lay on the horizon in bands of misty color that faded from green to gray. Above them, distinct in the far distance, soft, cottony clouds piled themselves heavenward.

Reaching the pilot room door Ned paused again. His eyes were now fixed on the world of clouds above him. His abstracted look had disappeared. His eyes swept the sky from west to east. Just above him, fleecy banks of motionless clouds seemed suspended, great umbrellas to protect the earth from the glistening sun. Their tumbling turrets turned to translucent pearl by the sun, below they joined to make one canopy of fleeting gray. Here and there, through rifts in this, Ned had seen that which made him halt again. Then he hurried to Alan's side.

The town of Derby had been passed and Roy had just cautioned the pilot that Middleton lay twenty-five miles ahead with Hartford ten miles abeam to the north.

"What 's she doin'?" asked Ned.

"Ain't had a hitch. But I 'm up a little—seems to handle easier."

"I hope so," answered Captain Ned soberly, and he hobbled over to Roy's desk. One look at the speed register and the look of concern on his face deepened. The needle was yet vibrating just beyond the two and one-half mile figure. Then he went back to the wheel and for some moments studied the gauges showing the propeller revolutions and the engine development. The propeller speed had lessened but the engines were doing the same work that had already driven the car one hundred and eighty miles an hour. Alan knew what was going on in Ned's mind and he chuckled.

"Don't get scared before you 're hurt," he said, laughing. "I guess you 're a little upset yet. Go back there and lie down a while. We 're doin' all right."

"We 're a half mile slow," answered Ned. "We 'll have to go up right away. There 's a fast drift above this bank of clouds and it 's all in our favor—"

"Up nothin'," laughed Alan again as he turned his wing wheel slightly and brought the *Flyer* on an even keel again. "Go look at the register! Do you know what we did between Norwalk and Derby?"

"Better than we are doin' now?" asked Ned.

"It 's twenty miles. We reeled it off in six and a half minutes. What 's that figure out?"

"One hundred and eighty-four miles an hour," volunteered Roy with alacrity.

"But," began the astounded Ned pointing to the speed indicator.

"I told you I was liftin' her a little," explained Alan. "Look at her now."

Another glance showed Ned that the aeroplane had found herself. The indicator showed a speed of practically three miles a minute. The nervous young commander threw himself into Buck's camp chair.

"I—I see," he said at last, "but what did it? She had all you could give her when I went out."

"Sure," explained Alan without turning his head. "But we did n't get any help from the breeze comin' up the Sound. You 've got to remember we 're gettin' a little slant of it now. If there 's a fair breeze higher up and this ain't fast enough for you I can go up and do better—"

"This 'll do," answered Ned a little hysterically. "I guess you 're right," he added soberly. "I think I 'll lie down a few minutes and try to pull myself together."

As Ned disappeared into the state room Alan said to Roy:

“That ’s the first case of ‘nerves’ I ever saw in Napier. But he ’s certainly excusable to-day. That little swing of his was enough to give any one the rattles. When he comes out of that room he ’ll be the boss again. Stand by for Middletown with Hartford on the port beam,” he concluded. And silence once more fell on the wind swept pilot room.

There seemed no longer any question as to the stability or speed of the *Ocean Flyer*. All that those in charge of it now had to fear, so far as they could see, was an accident—an unlooked for storm, the breaking of machinery or a bit of carelessness that might end disastrously before it could be corrected. When Ned retired to the stateroom Roy took the wheel a few moments while Alan went below.

He found Bob installed on a camp stool by the emergency engine levers, a bit of waste in his hands and his eyes on the speed indicators, clock and signal board. Buck, now wholly recovered from his illness and his face and clothes spotted with oil drippings, was on his knees at the silent dynamo cleaning and polishing its exposed parts. There was already a hot, greasy smell in the engine room. But there was not a discordant sound, not a jar to alarm the second officer.

With a quick feel of the main bearings for possible heat, Alan looked over the fuel and oil supply gauges and then motioned to Buck to follow him.

"Leave your cap in here," he suggested with a smile. Taking up an oil can he passed to the gallery and led the way aft to the tail truss. On the long, narrow gangway reaching through this, protected only by slender cables on each side, he made his way toward the big twenty foot parallel rudders.

"Don't look down," he suggested to Buck, "and hang on to the cables. It 's worse than walkin' a rope, for a tight rope don't fly up to shake you off."

"I 'm all right," responded Buck. "I 've been initiated. Go ahead."

Unlike a wind, with its varying gusts and puffs, the air hurled rearward by the propellers struck the two boys with a steady pressure. Clothing clung to their bodies like a wet glove. Their hair was plastered down as if with pomade. With shoulders stooped and legs bent under the strain, Alan led the tenderfoot Buck slowly out over the void beneath—now nearly 3,000 feet.

"You may have to do this to-night," yelled Alan bringing his mouth near to Buck's ear.

"But never try it unless the lights are on. And never let go the cable. The rudder bearings need oil. They 've been workin' like a barn door with rusty hinges."

Reaching the end of the truss gangway, Alan braced himself and oiled the bearings. The lower ones were accessible from the lower gangway. The upper ones he reached by crawling through a manhole to the top of the truss, along which ran another exposed and unprotected gangway. By means of this the big balancing plane could be reached in emergencies.

"But don't let me ever catch you up here," admonished Alan as he dropped down again.

"Very good, sir" responded Buck with a twinkle. "But you 'll trust me with this work?"

"Only when you are ordered to do it."

"How about the propeller bearings?" went on Buck eagerly. "Don't you reckon they need a little oil?"

"Look here," replied Alan. "Get that notion out of your system at once. I would n't even let Russell go out there. When the propellers need attention we 'll attend to them. The rear of those wheels is n't anything but the tail of a tornado."

Reaching the engine room again, Alan explained in detail to both boys what had already

been done on the voyage, the ground covered and the speed. With renewed instructions he disappeared above.

For some minutes no sound came from the pilot room except, now and then, the slight jar of adjusting planes as the pilot shifted slightly with the wind. Buck, balancing himself at the starboard door—across which the guard rail had now been dropped—listened always for the monotonous but fascinating words of the pilot and observer as land marks were passed and the hour was compared and noted.

“Webster,” repeated Buck to the unmoving Bob at one time. “Three, fifteen, twelve o’clock,” Buck added, listening for more.

“Right,” repeated the vigilant engineer noting his own time.

“Thirty-four minutes from Norwalk,” went on Buck as he heard Roy make the announcement above.

“What was the speed?” asked Bob. “It ’s three miles now,” he added as he examined his own register.

“Average speed between Norwalk and Webster for ninety-five miles, two and eight-tenths miles a minute,” called Buck excitedly.

“Great,” cried Bob. “We ’ve jumped four-

tenths of a mile. It was two and a half on the first leg to Norwalk."

Buck was again listening.

"He says we should have been over Webster at six minutes after three and that we 're eight minutes late," he repeated.

"It 's fifty miles to Woburn," volunteered Bob, consulting a memorandum book into which he had copied the land parts of their early flight. "Look out for old Bunker Hill when we get to Woburn. Boston 'll lie ten miles abeam on the starboard."

A few minutes later observer Osborne came down the ladder and confirmed jubilantly what Buck had reported. He also told Bob and Buck for the first time of Ned's nervousness and how he was then resting in the state room above.

"That 's good," commented Bob. "I think his leg hurt him a good deal worse than he let on."

"Don't bother about that stool for him," went on Roy. "Alan and I 'll take the wheel. Ned can sit in on my trick at the desk."

"But it 's ready," explained Buck pointing to an empty tin provision box to which he had lashed a camp stool. "And you and Alan can 't keep awake till to-morrow afternoon!"

Roy only smiled and turned to the hooks in the

store room on which were hung extra clothing. Selecting an aviator's close fitting hood he put it on and adjusted it about the neck.

"Gettin' cold?" asked Buck wonderingly.

"I 'm goin' to take a stroll while Alan runs the shop," answered Roy laughing. Selecting a can of special lubricating oil, he loosened its screw cap and then, pausing at the store room door to call "all ready" to Alan at the wheel, he stepped onto the gallery and, climbing lightly over the rail, caught the guard cable in his left hand and made his way out on the suspended gangway leading to the starboard propeller.

The moment Roy reached the edge of the terrific gale shooting rearward from the heard but unseen propeller blades he gripped his support anew, and while the fragile looking but strong ropelike bridge swayed dizzily in the gale, made his way without hesitation to the propeller frame. Buck and Bob almost held their breaths while they watched Roy, crouched to break the force of the compressed atmosphere, raise the oil reservoir lid and pour the liquid into the supply tank. He returned in safety, Alan regulating the equilibrium as he did so and then, adding a pair of goggles to his outfit, repeated the same work on the port reservoir.

"Are you going to do that to-night?" asked Buck thoughtfully.

"About three times," answered Roy, removing his protecting appliances.

"If you 're busy," volunteered the ambitious Buck, "I can do it. I 've already got orders to look after the rudder bearings. I 'd like to be something. 'Chief Oiler' would suit me!"

"Like as not," answered the amused Roy. "But, you see, you 're a sort of guest. They don't take chances with guests. And I 'm a paid hand."

The speed of the *Flyer* was so terrific that there seemed no long view of any one point. No sooner was a hill or town plainly sighted than the lightninglike airship seemed over it and, in a few more minutes, the place had faded into gray astern. The moment Alan announced to Roy that Woburn was in sight Bob called to Buck:

"Then Boston 's also in sight ten miles abeam."

"And the sea!" shouted Buck.

When the *Flyer* shot over Woburn all knew that it was but twenty miles further to Ipswich where the real flight over the sea was to begin. Ned had not yet appeared. At exactly forty minutes and twenty seconds after three o'clock the *Flyer* passed over the main wharf of Ipswich at an elevation of 2,800 feet. Beautiful summer homes

stretched along the bay on each side of the town. In the rear lay the bare granite hills and the derricks of great quarries.

Breathless with excitement, Buck once more took station on the gallery. He could distinctly hear the puffing of little derrick engines and the business like "tamp — tamp" of quarry drillers. A strange feeling came over him. It seemed to him, as was natural to a reporter, that some ceremony should attend the moment. But, above him, Captain Ned lay quietly in his state room. Alan stood at his wheel stolid and silent. At the desk, not even rising to take a look at what was below, Roy bent low over his work. In the engine room, Bob Russell, as if unconcerned, sat at his gauges and signal board.

As the little city fled backward Buck saw a squat stone-boat making its way up the crooked bay. At the same moment, on a distant stretch of white beach, he made out a group of bathers. Would he and his friends ever come to home and harbor again? Would they ever again come back to a world of pleasure and safety? In these minutes the *Flyer* was five miles at sea.

"Two lighthouses on the starboard beam," he heard Alan exclaim suddenly.

"Plum Light eight miles abeam and Thatcher's

Island Light off Cape Ann," called back the observer, checking the time.

"Three, forty-three o'clock exactly," went on Alan with precision.

"Three-forty-three o'clock," repeated Roy. "And the course is north, sixty-five and one-half degrees east."

"East, north, east by compass!" replied Alan.

"East, north, east it is," repeated Roy. "Make it so."

And in this wise, with the blue sea beneath them at last and a shore line fast fading in the west, the real voyage of the *Ocean Flyer* began.

CHAPTER XVIII

THE RACING PIGS OF FUNDY

The next land the *Ocean Flyer* would pass over was the fifteen mile wide peninsula of Nova Scotia lying between the north arm of the Bay of Fundy and the Straits of Northumberland. The town of Amherst at the head of the Bay of Fundy was the next objective point. By the Route Chart it should be reached a little after six o'clock. The course between Ipswich and Amherst lay across the Gulf of Maine.

Islands and light houses, with glimpses now and then of the mainland, made the work of the pilot easy. Yet, Roy persisted in his work, and the routine of the time record and the checking and confirming of known landmarks was not relaxed. In this manner the Isle of Shoals, Montigan, Matinicus, Mt. Desert, Great Duck, Petite Manan, Moosabec, Libby, Machias Seal Islands and Cutter's Harbor were passed, the latter sighted at twenty-eight minutes after five o'clock—the weather so far clear and fair and the barometer steady.

Not one of these islands was directly in the airship's course, all of them showing either abeam to port or starboard and frequently only to be located in the distance by their lighthouse towers or their high, rocky bluffs. Cutter's Harbor was an important point, for from it the sharp-eyed Alan got his first glimpse of the Grand Manan, the big rock pile thirteen miles long that guards the entrance to the Bay of Fundy. A few miles east of Cutter's Harbor the pilot picked up the southwest light of Big Manan. Then the West McQuoddy Light appeared four and a half miles abeam to the south. When Long Eddy Foghorn was made out on the white cliffs at the north end of Manan, the Bay of Fundy lay dead ahead.

"I was afraid of this," shouted Alan after he and Roy had made their reports and checked them. "We 're runnin' into the 'fog factory' and it looks like a change."

"It 's been gettin' cooler for the last half hour," answered Roy. Both now noticed that the glare had gone out of the sun and that the clouds had lost their fleeciness.

"I hope, if it 's fog," went on Alan, "that it 'll hold off till we pass Amherst. If we could have clear weather to Fogo Island it would be better. Towns, islands, lights and rivers are beautiful

checks on our compass course. We get to Fogo at seven thirty-two and it 'll be daylight yet."

For some time Roy was silent. He was consulting the estimated time of reaching various points and figuring. Finally he arose and braced himself at Alan's side, an alarmed look on his face.

"The engineer's table estimates we 'll reach Fogo Island at seven thirty-two o'clock traveling at three miles a minute," he said, consulting his notes again.

"That's right," answered Alan. "We 're doin' it, ain't we?"

"We cleared Big Manan at five thirty-four!"

"Well?"

"That 's five hundred and forty-six miles from New York."

"What 's wrong?"

"It 's six hundred and fourteen miles from here to Fogo Island—"

"What are you gettin' at?" interrupted Alan somewhat excitedly.

"Only this: you can't get to Fogo by seven thirty-two o'clock this evening."

"We can 't?" exclaimed Alan. "Why not? Those are the figures. What 's wrong?"

"The trouble seems to be," continued Roy,

“that someone did n’t check his figures. The list of distances between points is footed up as nine hundred and ninety-two miles from the Battery to Fogo. Well, it ’s eleven hundred and sixty miles!”

Alan looked at him with eyes popping.

“It ’s one hundred and sixty-eight miles farther than was figured. We can ’t get to Fogo till nine o’clock as I figure it.”

“How much later is that?” asked Alan finally—his lips set.

“One hour and twenty-eight minutes.”

A long whistle escaped the pilot’s lips. He tried to keep his composure by forcing a smile but it was a failure.

“Do you suppose there can be a mistake in our ocean chart?” he continued at last.

“Probably not. Your man would n’t likely make two errors.”

“When ’ll that bring us to London—an hour and twenty-eight minutes late?”

“Thirty-eight minutes after one o’clock tomorrow afternoon, allowin’ for the difference in time,” replied Roy promptly.

“Then we ’ll never come back in twelve hours,” announced Alan decisively. “Unless—” and he paused.

“Unless what?”

“Unless we make no stop in London—or fly faster. But say!” he exclaimed suddenly, “How ’d you figure there ’s a mistake? How ’d you know it ’s eleven hundred and sixty miles to Fogo? I checked those figures. If the distances are right you can bet it ’s nine hundred and ninety-two miles.”

“Did you ever calculate the distance from New York to London on a great circle?”

“Sure. It ’s three thousand two hundred and eighteen and one-tenth miles.”

“That was by latitude and longitude, was n’t it?”

“Certainly.”

“What did the same kind of calculation give you between Fogo and London?”

“Two thousand, fifty-eight and one-tenth miles,” answered Alan, the figures at his tongue’s end.

“The difference is eleven hundred and sixty miles. *That* ’s the distance Fogo is from New York. The chart shows nine hundred and ninety-two miles. Where ’d you get those figures?”

Alan indicated to Roy to take the wheel. Stepping to the table and sailing chart he studied the latter some minutes. When he arose he noticed

that a mist was perceptible even in the pilot room. As he resumed his place at the wheel he growled:

“We did this first leg of our flight on tangents with parallel rulers. We got the distances from the map scale of miles with dividers. I reckon the dividers were loose. That ’s all.”

“That ’s hardly navigation,” said Roy with a half smile.

“Not even common sense,” snapped Alan.

Off St. John’s, New Brunswick, the mainland should have been in plain view but the outer buoy in the harbor, over which the *Flyer* passed, was made out with difficulty. But, when its vague shape was at last sighted the hour was noted as five fifty-one P. M., and the course was immediately altered to E. by N. The fog was now gathering fast and the rocks and trees of the rugged New Brunswick coast soon disappeared from sight. Watching closely for Cape Chignecto Alan headed the airship for Amherst at the tip of the Bay of Fundy, seventy-three miles distant.

A problem now confronted the pilot. The fog soon thickened to a mist that resembled a drizzling rain. The flight of the aeroplane hurled this chilling vapor through the pilot room. Alan was debating what to do. It was possible to ignore the land beneath and to begin the long compass

flight to London at once. But it was wisdom to check their flight, as long as possible, with points beneath. In the fog these could not be distinguished at the height they were flying.

"We 'll have to drop to five hundred feet or less," he suggested to Roy, "if we expect to pick up Amherst or any of the Prince Edward Island marks. What d' you say?"

"I 'd come down and I 'd stay down till it 's too dark to make out the land. That 'll be about Cape Anguille on the west coast of Newfoundland. Then we 'll cut loose and say good-bye to America."

Calling below to Bob to close the engine room doors and ports, Alan was about to head down when he suggested to Bob to see if the ports in Ned's state room were closed. At Roy's first step within the room Ned sprang up wildly. In another moment, wincing from the pain in his stiffened leg, he was by Alan's side.

"What time is it?" he began as he looked with dismay out on the blinding fog.

"A few minutes after six," answered Alan with a smile.

"Six, three," corrected Ned looking at the chronometer himself. Then he stepped heavily to Roy's charts. "Are we on time? Why 'd you let me sleep?"

“We ’re on time, goin’ without a slip, just passed St. Johns and—because you needed it.”

“St. Johns?” repeated Ned. “You ’re drop-pin’!”

“Ready to get a bearin’ on Amherst, Nova Scotia, when we pass. Everything ’s fine—exceptin’ the fog.”

“I went to sleep,” exclaimed Ned who was yet a little dazed.

“That ’s right,” said Alan. “I ’ll take my turn later.”

“I did n’t mean to,” persisted the other boy. “Did n’t you need me?”

“Movin’ like clockwork,” insisted Alan, trying to placate the disgruntled Ned. “The weather was fine up to Big Manan. I think it ’ll clear before we reach Fogo Island.”

“Did you say we ’d just passed St. Johns?” interrupted Ned excitedly, almost himself again. “We ought to have been there over an hour ago if it ’s after six!”

This necessitated the explanation of the error in the Gulf of Maine sailing chart and then the explosion came. In time, when Ned had calmed down and had gone over the figures himself, he became philosophical.

“I don’t mind bein’ an hour and a half late

goin' over," he said at last, "but we 've *got* to come back in twelve hours."

"I 'd like to," said Alan. "We can save some of it by shortening the stop in London."

"We 'll save *all* of it!" announced the young captain decisively.

"We may catch a fair wind," suggested Roy.

"Fair wind or not," exclaimed Ned, "we 'll come back on time if we have to go up above the clouds to do it."

By this time the *Flyer* was only a few hundred feet in the air. In the silence that followed Ned's positive assertion a strange sound fell on the ears of all. On the instant, Alan's face paled and the wing wheel sped around to throw the airship upward. It was the unmistakable, frightened grunting of pigs.

"Off our course," yelled Roy springing forward to examine the compass.

"Then the chart 's wrong," exclaimed Alan. "We 're on our line within half a point."

Ned burst out laughing.

"Are n't you hugging the shore along here?" he asked, still chuckling.

"All the way," answered Alan quickly, "but over the water—not over barn yards. Them 's pigs. The course is wrong."

“And you ’re on the Nova Scotia side of the bay are n’t you?”

“We ought to be. But it looks like we ’re sailin’ over a lot of Blue Nose Cajan farms. And there ain’t no farms called for by my chart.”

“I once read a book about Nova Scotia, ‘Among the Blue Noses’—and now I ’m glad I did,” went on Ned. “Don’t get scared. You ’re all right. The forty-foot tide of old Fundy is just comin’ in—that ’s all. Drop her down again. You ’re in no danger.”

“Do tides squeal like pigs?” almost sneered Roy, his face a blank.

“Listen to a bit of natural history,” went on Ned. “Be it known that this shore of Fundy is a succession of small farms. Each farm supports its share of pigs. But this support is not corn, of which there is none to spare. The pigs must forage for themselves. From living on the sea shore the porkers have learned that clams are succulent and fattening. When the tide is in, there is no beach on which to pick up a dinner. When it is out, it is good and out. The forty feet that it rises gives a beach two or three miles wide in places when the tide is out. Seeking the freshest and fattest clams, the Blue Nose pigs follow the receding tide as far as they can. Then occurs some-

thing that proves one is right when he calls another a pig—meaning the other has a pig intellect. However old they grow, these clam chasing pigs never learn by experience. They are always astonished when the tide turns. They doubt the fact until the rising water swashes their noses. But they have learned one thing—unless they beat old Fundy they 'll need no more clams. They fly before the swift tide and race for the farm. Their grunts are expressions of astonishment and anger. You 've just heard the racing pigs of Fundy. For further details consult the skipper of any old New Brunswick lumber lugger."

For a few moments Alan and Roy eyed Ned in silence.

"I guess you 're right again," said Roy soberly as he turned to his desk and took up his chart.

"If you 're quite through," said Alan in turn without a smile and bringing the *Flyer* toward the sea again, "I suggest you ask Buck to bring up some food."

"That must be Amherst now," exclaimed Ned sobering instantly as the noise of a puffing engine sounded through the fog. In a moment there was no doubt of it. The *Flyer*, less than four hundred feet in the air, shot over the edge of the little city.

Ned threw open the port door and hung over the gallery rail to get more details. As the fog rolled in Alan shouted:

"Come in here, you Blue Nose pork, and shut the door."

"Well, it 's Amherst, anyway," answered Ned laughing as he hobbled in again, "I made out the brick yard on both sides of the railroad track."

Alan and Roy gave him little attention. They were busy confirming time, speed and location.

"New course, east by one-half north," exclaimed Roy.

"East by one-half north," repeated Alan.

"Make it so," quickly continued Roy in a tone of pride that was plainly meant for Ned. "Cold Springs in Northumberland Straits, twenty miles ahead. Weather cool and foggy," he concluded as he entered the same in his log.

"Sounds like a yacht," remarked Ned, still laughing. "I guess I 'll go below."

"Hurry up some supper," repeated Alan who was again intent on the flight ahead. "Buck must be asleep."

But Buck was n't asleep. For four hours, almost without quitting his chair, Bob had not left his gauges and indicator board. He was still there, the close room now hot and stifling with its

closed doors. Buck, on the contrary, since half past four, had been busy in the storeroom in the forward end of which was the galley.

"How 's the eats, Buck?" called out Ned opening the door to the galley. There was no need to ask. The odors that rolled out were positive evidence that, whatever might be Buck's culinary skill he was at least a miscellaneous and prodigal provider.

"How you feelin'?" were Buck's first words.

"I guess you needed a bracer worse than I did," answered Ned.

"Gettin' scared don't hurt. I 'm all right."

The embarrassed young men faced each other a few moments in silence.

"There 's pea soup and hot crackers, hot pork and beans, steamed frankfurters with rye bread and pickles, orange marmalade and some o' them fancy preserved pears, hot plum puddin', coffee, and strawberries. How 'll that do?" exclaimed Buck wiping his perspiring forehead with a black looking handkerchief. "Bob says I ought 'a' cut out the puddin' but I put that in for myself."

"Where are we goin' to eat it?" roared Ned.

"You got to come down here near the stove. That 'll be best," suggested Buck. "There 's chairs and a foldin' table right there in the store

room. "Ain't no way to get these hot things up stairs or I 'd 'a' rigged up a spread in a state room."

"You 're doin' great, Buck," laughed Ned, "and you 'll either save us from starvation or kill us with pickles and plum pudding."

Ned went to the ladder and called off the entire bill of fare to the busy boys above.

"What 'll you have?" he concluded soberly.

"All of it," yelled Alan and Roy together. "And what 's the matter openin' some o' those olives?" added Alan.

Within a few minutes Ned had the dynamo going and the lights glowing in the store room. Then two of the folding tables were set up and at half-past six o'clock, Roy having announced Cold Spring Harbor on Northumberland Straits, Chef Buck yelled "First call for dinner on the *Ocean Flyer*."

Relieving each other at the wheel and engine, in an hour the five boys had all dined. In that time the fog had partly lifted. At seven thirty-seven o'clock it was possible to confirm their bearing by a glimpse of their first lighthouse rays, the flashing white light on Cape Anguille in Newfoundland. In that time the *Flyer* had crossed Northumberland Straits, twenty-five miles wide;

passed over Prince Edward Island, a stretch of twenty-six miles and then over water again as the Gulf of St. Lawrence was reached. Many towns, and even great summer hotels had been in sight during the latter part of the afternoon but here Ned, then at the wheel, saw the last settlement—the fishing village of Tracadie Harbor on Prince Edward Island.

For thirty-four miles the airship followed the bend of Prince Edward east. In the misty evening glow East Point Light was just noted to the south with Magdalene Island lying to the north.

“It ’s almost like runnin’ on a track,” said Ned to Alan, who relieved him a little later. “To make sure we don’t get lost, ninety miles out there in the gulf you might pick up St. Paul’s Island Light. But it ’s twenty miles south of our course. I reckon you won’t see it in the fog.”

When Ned had finished his dinner St. Paul’s Light had been passed unseen on the starboard beam and the fog was lifting rapidly. When Cape Anguille Light suddenly winked like a pale star, almost dead ahead, Ned summoned Buck to the pilot room. Then he went below to the engine room and relieved the faithful Bob.

“You boys go above,” he ordered. “You ’re both reporters and you love the picturesque and

dramatic. We 'll be over Newfoundland in a few minutes. Then it 'll be only two hundred and forty-one miles over the last land we 'll see till we reach the old sod of Ireland. I want you to see all you can—you may need the impressions in your newspaper stuff. I 'll run up when you sight Fogo Island."

When Newfoundland's dark pine forests, its lakes and rivers, its rocky wilds where yet the moose lives and multiplies, had filled the circle of the horizon beneath the birdlike aeroplane, it was eight o'clock. Just then the long obscured sun broke through the mist clouds. A brilliant orange and red sky suddenly darkened the lakes and woods beneath. Then the uninhabited world turned to a sunset glow as if the day had been born again.

"It 's the longest day in the year," exclaimed Buck. "We 'll see Fogo!"

At ten minutes of nine Alan announced:

"Fogo Island, almost dead ahead to port."

Bob and Buck were on the port gallery when Ned joined the excited pair.

"Gentlemen," exclaimed Ned taking out his watch, "we shall lose five hours by the time we reach London. Since our next points of bearing will be reached under London time we may as well

change our watches now as later. When we pass Fogo Island I suggest we move our time pieces ahead five hours."

"Fogo Island and eight fifty-nine P. M.," exclaimed Alan a few minutes later.

"Fogo Island and one fifty-one A. M.," announced Ned laughing.

And as the hands of four watches flew to the new time, the flight over sea began.

CHAPTER IX

A CHANGE OF PLANS BY WIRELESS

Fogo Island, bleak, uninhabited and wave drenched, is now known for nothing except that it is the only island cut by the great circle or shortest course between New York and London. In time it will be known as the intermediate land station on the aerial route between these two great cities. It lies in 50° west longitude and $50^{\circ} 40'$ north latitude.

At one minute of two o'clock on the morning of June 22, by the altered watches, and eight o'clock and fifty-nine minutes by the unaltered chronometer, the *Ocean Flyer* cleared this vague, rocky point and headed S. $79\frac{1}{2}$ E. at an elevation of 2,500 feet. For 146 miles the airship was to hold this course. It seemed strange to Buck to see the compass showing a course east by south which, in his judgment, presaged a landing in France.

"If it was n't for the magnetic variation," explained Alan, "we would sail north, sixty-seven degrees east. But the magnetic variation in this

place is thirty-three and one-half degrees. We 've got to subtract this variation. As there are only ninety degrees in a quadrant this sixty-seven degrees north of east changes to seventy-nine and one-half degrees south of east. Or, by compass points, east by south. The first is the true course. The last is our magnetic course."

"And the rest of our journey," added Ned, "is made up of eleven straight flights across the Atlantic."

He showed Buck the pilot chart on which these lines were indicated with the altered courses for each and the tabulation for the pilot's use. These were now spread out on the operator's table ready for the night's long vigil. The tabulated matter was a maze of figures in this form:

Fogo Island to London—Rhumb Line Course:

MILES:

146 to 50° W. and $50^{\circ} 40'$ N.; True course N. 67 E.

Variation $33\frac{1}{2}^{\circ}$ W.; Magnetic course S. $79\frac{1}{2}$

E. or E. by S. Time 8.59 P. M.

199.6 to 45° W. and $51^{\circ} 45'$ N.; True course N. 71 E.

Variation 35° W.; Magnetic course S. 74 E., or E. S. E. $\frac{1}{2}$ E. Time —.

206.7 to 40° W. and $52^{\circ} 35'$ N.; True course N. 76 E.

Variation $35\frac{1}{2}^{\circ}$ W.; Magnetic course S. $68\frac{1}{2}$ E. or E. S. E. $\frac{1}{8}$ E. Time —.

177.8 to 35° W. and $53^{\circ} 15'$ N.; True course N. 77 E.

Variation 35° W.; Magnetic course S. 68 E. or E. S. E. Time —.

169 to 30° W. and $53^{\circ} 40'$ N.; True course N. $81\frac{1}{2}$ E.

Variation 34° W.; Magnetic course S. $64\frac{1}{4}$ E. or S. E. by E. $\frac{3}{4}$ E. Time —.

191 to 25° W. and $53^{\circ} 50'$ N.; True course, N. 87 E.

Variation $31\frac{1}{2}^{\circ}$; Magnetic course S. $61\frac{1}{2}$ E. or S. E. by E. $\frac{1}{2}$ E. Time —.

180 to 20° W. and $53^{\circ} 50'$ N.; True course E.

Variation 28° E.; Magnetic course S. 62 E. or S. E. by E. $\frac{1}{2}$ E. Time —.

215 to 15° W. and $53^{\circ} 35'$ N.; True course S. 85 E.

Variation $25\frac{1}{2}^{\circ}$ W.; Magnetic course S. $59\frac{1}{2}^{\circ}$ E. or S. E. by E. $\frac{1}{4}$ E. Time —.

180 to 10° W. and $53^{\circ} 10'$ N.; True course S. $81\frac{1}{2}$ E.

Variation $22\frac{1}{2}^{\circ}$ W.; Magnetic course S. 50° E. or S. E. by E. $\frac{1}{4}$ E. Time —.

192 to 5° W. and $52^{\circ} 30'$ N.; True course S. 78 E.

Variation $19\frac{1}{2}^{\circ}$ W.; Magnetic course $58\frac{1}{2}^{\circ}$ E. or S. E. by E. $\frac{1}{4}$ E. Time —.

201 to 0° W. (London) and $52^{\circ} 30'$ N.; True course S. 72 E.

Variation $16\frac{1}{2}^{\circ}$ W.; Magnetic course S. $55\frac{1}{2}^{\circ}$ E. or S. E. $\frac{7}{8}$ E. Time —.

2,058.1 Miles Fogo Island to London.

1,160. Miles New York to Fogo Island.

3,218.1 Miles New York to London.

“Not for me,” sighed Buck. “And that ’s what you thought I could do? Not in a thousand years. Take it away.”

“Here ’s a little one that is easier,” went on Alan pointing to a smaller card while the other boys laughed.

“Looks better than the alphabet and funny marks and figures,” conceded Buck. “What ’s that?”

“This is another land chart,” explained Alan. “It tells us where we ought to strike Ireland—sort o’ postscript to the other chart. With it and your knowledge of London’s vicinity we ought to be able to shut up the compass later. Look at it! It won’t bite.”

This smaller table was:

Arran Island (Galway Bay) Ireland to London
Air Line Route

Fogo Island (New Foundland, to Arran Island (Ireland)1,665.1 Miles

Arran Island (North Light) to Go-		
rey (Wexford)	123	Miles
To line off shore between Arklow		
Bank and Blackwater Bank.....	8	“
To Cardigan Bay Lightship.....	56	“
Cardigan Lightship to New Quay,		
Wales (England)	41	“
New Quay to London, passing south		
of Hereford, over Cheltenham,		
between Oxford and Abingdon and		
south of Harrow to Hyde Park....	165	“
Total.....	2,058.1	Miles

“Find Oxford,” was Buck’s only comment, “and I ’ll show you the way from that town. If that ’s all for the present I ’ll go below and wash the dishes.”

The *Flyer* being now well on her new course there was a conference and a program was made of the night watches. These were divided into three-hour tricks beginning at ten o’clock (“or three o’clock, which ever you like,” suggested Ned laughing). Bob had already instructed Buck as to the things to look out for in the engine—that the gasoline and ether supplies were free and working, that the lubricating cups were full of

oil and, most essential, that the bearings were not hot. The two reporters were to alternate in the engine room, Buck going on at ten o'clock and giving Bob an extra hour on the first trick which would give the latter four hours straight sleep.

"Here are notes on the best time we can make to each change of course," suggested Roy. "If some one will call me before the altering time I 'll get enough sleep between legs. The pilot can watch his own barometer and I 'll note everything about once an hour."

This was agreed upon, Ned insisting on giving Roy three hours undisturbed sleep between one and four o'clock, when Alan relieved him. Ned and Alan were to manage the wheel, generally taking three hours on and three off. This arrangement being agreeable to all Roy took the wheel while the captain and Alan made a complete survey of the airship. Each detail of the engines was scrutinized and further explanations made to Buck. Then, drawing on sweaters, for the sea air was cold and damp, the Airship Boys examined each plane and its supports and finally oiled the rudder bearings and refilled the propeller lubricators.

They returned to the engine room and the acetylene gas was turned on and with only a low,

shaded light over the engine gauges, Roy's desk and the binnacle, the dynamo was shut down. Ventilators were opened and all ports and doors closed. Everything shipshape, Bob was persuaded to turn in. This he did in stateroom number two. Roy kept at the desk until the end of the first sea leg was reached, took the readings, gave the new course and then entered the new time figures—"forty-seven minutes and thirty-six seconds after nine o'clock." Then he settled himself for his first doze while the aeroplane reeled off its next leg, 199.6 miles.

"It 's ten o'clock," said Ned to Alan, "and your bed 's ready. Tumble in."

But Alan, although he surrendered the wheel, only moved to the lookout and peered into the night in silence. The sea was so far below as to be out of view. The sky was clear with stars showing. With nothing outside to distract the eye the rush of the *Flyer's* own body through the air made it seem as if a spectral tornado were trying to hold the airship back. And the roar of it seemed to increase when the last glow of day blotted out the sea.

"I 've been thinkin'," Alan said at last, "that we made a mistake. We 're goin' to have trouble in London. We 'll be able to deliver the ma-

trices but it 's going to be another story to take on our passengers and get away again. The police are always too curious."

"Don't forget that the *Herald's* back of us," answered Ned, his eyes on the compass, for there was now no need to keep a lookout ahead. "I 'm countin' on their men to arrange that; to get a permit for us."

"And if they don't?" went on Alan skeptically.

Ned shrugged his shoulders.

"And, worst of all," went on Alan. "As I understand it, Hyde Park is pretty exclusive with its Serpentine and Rotten Row. How are we going to be sure our gasoline and ether and lubricator oil supply wagon or dray will be allowed in the park?"

"That 's a thing I 've been leavin' to the *Herald* agents," answered Ned slowly, "although I rather wish we had n't."

"That 's it," exclaimed Alan. "Maybe it ain't too late to take charge ourselves."

"Wireless?" asked Ned, turning to Alan in surprise.

"If we only had to deliver the matrices in the park," went on Alan nodding his head, "we could do that with a slow down. Then we could be off and give the 'bobbies' the laugh."

“But our passengers and the supplies?” urged Ned.

“We ain’t goin’ to get to London before half past one,” resumed Alan taking a position in front of Ned and laying a pocket map of London and its suburbs on the binnacle where the light fell on it. “Those picture makers will be through their work when the royal procession has reached Westminster and the exercises begin or as soon as they ’ve had a few shots inside the building—if they expect to do that. Any way, they ought to be free before half past twelve if they cut out the return parade. Bob says the men doin’ the coronation can leave any time after they ’ve had a look at the crowd. They know the program to the last word. And the supplies will be ready at any time.”

“Well,” commented Ned. “I think I get you. But, go on!”

“These men and our supplies ought to be out in the western suburbs of London—far out. Then we ’d throw out the matrices, get away before any one could stop us and make a landing where our passengers are waiting for us. They ought to be able to sneak out twenty or twenty-five miles in a good motor and the supplies could be sent early in the day.”

"Then we could stop in peace and safety," broke in Ned enthusiastically, "long enough to overhaul everything and start again in good shape. Were you figurin' on the wireless?"

"Yes," answered Alan. "If we could pick up a liner either on this side or close in on the other it could forward the message. I don't think our outfit is strong enough to do much more—"

"Why not try a Labrador station?" interrupted Ned with enthusiasm. "We can 't be more than three hundred miles from a Marconi office there. I know there 's a telegraph line to Chateau Bay. Surely there 's a station just behind us at Heart's Content where the cables end in Trinity Bay, Newfoundland. And that 's not over three hundred miles either."

"Bob ought to be good for three or four hundred miles," suggested Alan, his eyes sparkling. "Shall we?"

"What 's the outfit for?" retorted Ned. "We can 't lose. If we don't raise any one we 're no worse off. Rouse him out!"

When the soundly snoring Bob was pulled from his bed and at last made to understand the sudden plan, sleep fled from him. In five minutes the dynamo was in operation and Bob was at the little desk in the store room. As the lightninglike

blue and green flashes in the condenser sounded through the airship, Bob, with his ear-set in place, bent low over the tuner. Before him, just showing in the small circle of his one shaded light bulb, lay his code and signal books for all systems on the far northern American coasts and the calls for all northern route steamers.

"I 'll raise something," he shouted with eagerness. "Get your message ready."

Buck had already been summoned from the engine room. With the first bark of the condenser Roy was awake. Only Ned stood to his post while Alan, Roy and Buck got out the detail maps of England, London and vicinity.

"Now," almost shouted Alan to Buck, "get busy." And he explained the situation. "These places all look alike to us. You know London and the country around it. We want the least settled place nearest to Fleet street that can be reached quickly by motor. Some open, smooth spot where the police are asleep. Some place that the *Herald* men will know without description. You 're the English pilot, as well as cook and rudder greaser. Now show us what you can do."

"'Acton,'" exclaimed Buck before he looked at the map. "We 'll pass it goin' in. And it is n't over five or six miles from Fleet street. It 's quiet

as the grave. There 's even a cemetery near by. There are open fields with walks. Why," and he reached for the map, "there 's some old ruins, a 'moat' they call 'em, about a quarter of a mile from the railway station. That 's a good meetin' place. Let 's see," and he ran his pencil over the big red, blue and green chart. "It 's on the Great Western Railway," and he pointed to a square green spot, "at the north end of Horn Lane, and there 's a fine road right out to it, from Horn Lane into High Street; then east to Acton Vale and then Uxbridge Road. You know they give a new name to a London Street every few yards," he explained laughing. "Then Notting Hill and Bayswater Road bring you right to Hyde Park. The place was made for just such a trick."

"That 's good," chuckled Alan. "Now for the message. If we can get this to the *Herald* tonight, it 'll go to London by cable at once."

"How 'll you know?" asked Buck.

"Don't need to," announced Ned from the wheel. "But you might put in that we 'll be within two hundred miles of Ireland, off Galway, at ten thirty in the morning. They might get us an answer there."

"Get your message ready," yelled a voice below.

"Heard any thing yet?" shouted three boys springing to the ladder opening.

"Not yet," replied Bob, "but when I do I want to break right in while I got 'em."

For some minutes Alan scratched away at Roy's table. Then he submitted the following:

"Herald, New York. Wire reporters photographers be at Acton suburb old moat one thirty London time with all supplies. Have motor for forms northeast corner Hyde Park from twelve thirty. Men carry white handkerchiefs. No stop park."

When he had read this Ned laughed.

"Can't you imagine the *Herald* will be just a bit curious as to whether we are in the air or the sea?"

Alan added:

"All well. On time. Left Fogo eight fifty-nine. This forwarded at ——— o'clock ('that 's for Bob to fill in if he ever gets it off,' Alan explained). At ten thirty P. M., about 240 miles off N. F. Napier, Ocean Flyer."

"Cut out the 'Napier,' " ordered Ned, "and I think it 'll do."

Alan did so but when he handed the message to Bob he instructed him to reinsert the name.

"And now," he added to the wireless operator,

“do your best. Meanwhile, as I can ’t help you I ’ll turn in.”

Despite the “bark, bark” and “snap, snap” of Bob’s condenser Alan and Roy were soon fast asleep. Later, the increasing cold awoke Alan. Dazed for a moment he at last got his bearings. He thought first of Bob and the wireless. Then he realized that there was no sound from the condenser. Springing up he hurried into the pilot room. There was no light over the operator’s table but in the gloom he made out the sleeping figure of Roy, his head on his arms. At the wheel, silent and rigid, stood Ned.

“What ’s the hour?” asked Alan sleepily.

“Nearly two o’clock,” came the answer in a low voice. “Don’t wake up Roy.”

“Where are we!”

“On the fifth leg, nearly eight hundred miles out.”

“And the wireless?” whispered Alan. “Where ’s Bob?”

“Asleep. He got Heart’s Content just after twelve. Put her through.”

“Great,” exclaimed Alan. “Let me take the wheel. I ’m an hour late.”

“Stand by for a new course,” was Ned’s only answer in a low voice.

“Aye, aye, sir,” sounded instantly from the operator’s table and as the light flashed, Roy was on duty again.

CHAPTER XX

THE FIRST SIGHT OF LONDON

On the morning of June 22 a fog lay on the Irish Coast until nine o'clock. Between that hour and ten o'clock the fog turned into a misty rain and it was not until nearly eleven o'clock that old Donald O'Meara, keeper of the north light on Arran Island off Galway bay, applied himself to the work of cleaning the outside metal and glass of the light house. At twenty minutes after eleven o'clock "Captain" O'Meara, sweeping the horizon as he recharged his little clay dudeen, made out a strange object in the west high above the sea.

"Captain" O'Meara was the first European to sight the first airship that crossed the Atlantic ocean. It was a few seconds after twenty-eight minutes after eleven o'clock when the *Ocean Flyer* passed the Arran light. As the giant airship approached this tower, the aeroplane seemed swooping toward the island as if to perch thereon. When the swift incline suddenly turned to horizontal and the dull metal wings carried the

aeroplane ahead only a few hundred feet above the dazed light keeper's head, O'Meara could make out no person aboard.

Although the veteran light keeper sprang into the tower when the roar of the cyclonelike propellers reached his ears and fled down the steps to his cottage below, the *Flyer* was yet in plain sight when he reported what he had seen, by telephone to the mainland. Within thirty minutes this information and similar reports had reached the Galway evening newspapers from a dozen sources.

"She looks like a big French aeroplane," came one message from Bullyvaughan on the south shore of Galway bay. "Like as not lost in the fog early to-day."

No observer suspected or suggested that the strange vehicle had actually crossed the Atlantic ocean. And the telegraph messages that hastened to London, receiving little attention in the midst of the coronation exercises, were not even repeated to America. Within the apparently untenanted car of the big air craft there was little excitement and almost no activity. The nerve tension of the long trip had resulted in a spiritless, almost tired condition that did not even prompt enthusiasm in the crew over the first

glimpse of the long looked for shores of the old world.

Ned and Alan were both at the wheel. They had picked up the Galway bay light with no other comment than "There she is!" And Roy, heavy-eyed but wide awake, had made his observations and set down his figures as mechanically as if yet far a-sea. In truth, as the *Flyer* had made her night-long swift flight eastward, hour by hour holding to its course in unvarying response to the powerful engine that never faltered, the surprise would have been *not* to see the landmark that spelled success and victory.

The arrangement of the night watches had been, in the main, carried out as planned. At two o'clock Alan relieved Ned at the wheel. About four thirty o'clock Ned took charge again and Alan was off till seven. From that time until ten o'clock Ned slept and at ten both boys were together to stick to the end. Roy, at the observer's table, got along with his three-quarter hour cat naps till seven o'clock in the morning when Bob spelled him off until ten o'clock. At this time Buck threw himself on the floor of the store room and was only called when the Arran light came in sight.

When the stars faded at four o'clock in the

morning and Alan felt the snappy night air changing to a colder moisture he feared a fog. Ned came on watch at seven o'clock to find every indication of heavier weather. Hoping that the fog, if it grew worse, would lift when the land was reached, the young aviators made the best of a bad prospect and Alan prepared to turn in.

"I 'd stick now, to the end," he explained, "if it was n't for what 's comin'. It 's a long haul back, old man," he added as he patted Ned affectionately on the shoulder, "and that 's goin' to be the real test."

"In more ways than one," replied Ned significantly. "But I 'm feelin' fine. Get what rest you can. We may have to stand a straight watch to-night."

"Is n't it surprisin'," exclaimed Alan, "that we 're not throwin' up our hats and yellin'? We 've practically crossed the ocean at last and there don't seem to be any excitement. What d' you think we 'll do when we really sight the land?"

"If it 's Arran light," answered Ned with a smile, "as I hope and reckon, I 'll bet our first thought 'll be 'Are we on time?'"

No member of the crew had been busier during the night than Bob. Only a part of his "watch

off” had he given up to sleep. In his eagerness he was frequently at the wireless, as the night wore on, watching and waiting for some answer to his earlier message. In mid-ocean this had been an almost useless precaution. The *Flyer* wireless outfit was hardly powerful enough to make a fifteen hundred mile connection. But Bob had a theory that the answer might come by way of some liner; that it might be picked up by the operator on some large steamer and thus relayed to the *Flyer*.

As the airship approached the Irish coast the keen young reporter was on the alert for a direct message from the station at the Lizard. At ten o'clock in the morning no word had been received and it was Bob's turn for a few more hours' sleep. As they must now be not much over two hundred miles from the land, Bob wanted to get off another message directly to the *Herald* office in London.

“There 's time yet,” he explained, “even if the other message went wrong. They 'll have three hours to change their plans—they can even send the fuel and oil wagon out to that place in three hours.”

Alan rather opposed the idea.

“We 've got trouble enough ahead,” he sug-

gested. "I don't suppose the government would know about it and of course the wireless people would n't interfere with a private message. But we can't send it without telling about our plans again and I don't like the idea of so many persons knowin' what we 're tryin' to do. If there 's a leak anywhere, you can bet the police ain't goin' to go to sleep on the job."

"I 'm not afraid of the message becoming known through the wireless office," said Ned, "but there are hundreds of amateur operators always on the lookout for practice. If one of these caught us he might not hesitate to tell all he knew. Wait a little while. We may hear something."

Disappointed, Bob surrendered and retired to a state room. However, Ned knew something about the working of the wireless and two or three times during the next three hours he sleepily arose and listened for a possible call. At ten o'clock Bob turned out for the long watch and, relieving Buck, alternated from that time in keeping an eye on the engines and an ear on the wireless receiver. At 10:30 o'clock all were relieved by a shout from Bob and almost before the three boys on duty could question him, the wireless operator was filling the store room with

loud "barks" of the wireless condenser. Bob had received a call and was pounding his key in response. Suddenly the wire ceased. A few moments of silence and then Bob threw off his head piece and shouted:

"New plan O. K.; new plan O. K. They got it. Message is a Marconi from the Lizard. Signed *Herald*. "Any answer?" he yelled as he sprang to the instrument again.

Ned examined the chronometer.

"Roy," he announced, "it 's ten thirty-two o'clock. How near in are we?"

The vigilant Roy made a quick calculation.

"We 're less than one hundred and seventy miles out."

"Send this," called Ned to Bob: "'Herald, New York. Ten thirty-two A. M. One hundred and seventy miles off Irish coast. Light rain. London one thirty P. M. Message received. *Flyer*.'"

At various times during the night the constantly changing watches of the airship had partaken of cold luncheon and hot coffee. Between ten thirty and eleven o'clock Roy and Bob between them had prepared an ample breakfast and when the lookout finally saw the Arran light and sang out "There she is!" Roy, Bob and Alan were at breakfast be-

low. It was then that Buck was aroused and all climbed above to feast their eyes on the point to which they had been making all night.

While the *Flyer*, speeding forward over the lakes and rivers, white highways, thatched cottages and little stone fenced villages of Ireland, carried its crew nearer the great metropolis, all was made shipshape aboard. The staterooms were arranged for the return passengers. The boys aboard had no plans for further sleep or rest except such as they could snatch while on duty or in the short stop before their start on the return trip. The program called for a departure from London at two o'clock or before. And the flight to New York was to be made in twelve hours "or less" as Ned put it.

The boys in turn freshened themselves with sponge baths and, when the Irish Sea hove in sight at twelve o'clock, every one was newly alert and as spick and span as if the voyage was just beginning.

"The Arklow Light five miles abeam to port," cried Ned a few minutes later.

"Blackwater Light five miles to port," chimed in Alan in great spirits.

"Nine minutes after twelve o'clock," shouted Buck standing by the chronometer.

“Two hundred and twenty-six miles to London,” called Roy from his table. “Stand by for Cardigan Light Ship and the Welsh coast.”

When the village of New Quay in Wales had been laid astern at twelve thirty-three o'clock and the *Ocean Flyer* at last had English soil in sight ahead there was new activity. Ned, Buck and Bob tried the engine room trap door; the rope ladder was attached to hooks at the door's edge and the landing ladder was got in readiness on the starboard gallery. Then a thirty foot length of line was procured and made fast to the matrix bundle. With this line the package was to be suspended below the car and dropped at the right moment rather than to take the risk of hurling the bundle from the slackened airship.

Alan returning to the pilot room, Ned sat down at Roy's table and wrote a message to be cabled to the *Herald*. Using what time he had before Oxford was reached, Buck also prepared a cablegram for his manager. Suddenly, all aboard seemed to have new duties. Only Alan had the time to examine the new land below. Welsh mountains soon gave way to the English country side of history and fiction. Almost unconsciously Alan brought the *Flyer* nearer the moors and woods of the outlying counties.

"They 're all here, boys," he shouted. "I 'd know it without Roy's chart."

"A little strange," answered Roy, "to go to London, turn around and leave England again without putting foot on the soil."

"You may have a chance to stretch your legs at Acton," broke in Ned. "We 'll be there nearly a half hour."

"Think I can run over to the village?" continued Roy.

"What 'd you want to do there?" asked Alan. "No soda water in England you know."

"I thought I 'd mail the folks a picture postal card," laughed Roy. "That 'll be one way to prove we 've been here."

"But a better way to put in your time," interrupted Ned again, "will be for you and Bob to take charge of the men who are to go back with us and get 'em aboard and in their staterooms. Buck," he announced, "you get the new supplies and water aboard and store 'em away. Alan and I 'll be busy with the fuel and oil. If we 've got any time left after that, we 'll stretch our legs and rest."

"Hereford, by the chart," was Roy's only reply. "Stand by for Cheltenham and Oxford dead ahead."

Buck, somewhat nervous over his coming pilot duty, was hastening to finish his report. When Roy announced Cheltenham a few minutes later, Buck hastily ended his copy, sealed and addressed it and sprang to Alan's side by the wheel.

"The shore pilot is aboard, sir," exclaimed Alan turning toward Ned and speaking with assumed dignity.

"Very good," answered Ned. "Turn the ship over to him."

Roy, continuing the joke, turned his land chart face down on the desk and arose with a smile, stretching his arms.

"I suppose I 'm off duty now, sir."

"Until we leave Acton at two o'clock," was Ned's sober reply.

"Bring her down to seven hundred feet," came a sharp order from Buck.

All looked up in surprise and Ned even chuckled. It was apparent that the new pilot had taken charge in reality. Before Oxford was reached the shadowy east had formed itself into the cloud that always hangs over a great city. The moors and farms of west England had long since merged into the park like places and estates in which rose the country homes of wealth and the nobility. Even at 700 feet these fled beneath the speeding

car until all detail was lost. Railway lines, vine-clad stations, the picturesque cots of rural hamlets were almost a blur. But they all meant one thing—London was near.

As the silver thread of the Thames at Oxford crossed their flight there was a new order from Buck. Ignoring the chart course of S. E. $\frac{7}{8}$ E. he moved his hand to the right, peering ahead, until he gave the word "hold her!"

Alan at the wheel seemed in doubt and showed it.

"I 'm doin' this," exclaimed Buck. "See those two towers dead ahead? Well, they 're Windsor Castle." Ned and Roy sprang to the lookout.

"Was that bunch of gray towers Oxford?" asked Buck craning his neck astern.

"And that 's Windsor ahead?" inquired Ned with no less interest. "This is certainly a fine way to study a new country."

"I would n't reckon Windsor was on our course," argued Alan.

"It is n't much off it," explained Buck. "But you 've got to remember I know London suburbs from the ground—not from the sky. It 's twenty-one miles from Windsor to Fleet Street. And it 's twenty-one miles of as windin' roads and streets as ever were made; suburbs and cemeteries,

prisons and gas works, remnants of old parks and flower spotted new ones; old mansions goin' to ruin in a world of tradesmen's villas and bungalows; electric trams and windin' railroads—"

"You don't mean to say you don't know the way in?" broke in Ned.

"I 'll get you there," answered Buck undisturbed. "And to be sure of it I 'm goin' by way of Windsor because you can 't miss its towers. There we 'll pick up the Great Western railroad and then we can 't miss our way."

"Sure you know the railway?" asked Alan anxiously.

"Throw me off if I don't," was Buck's answer.

"Where does it end?" asked Ned not wholly reassured.

"At the great Paddington Station."

"Then how do we get to Hyde Park?" was Alan's next question.

"It 's in sight. Before we 're well over the station I 'll point out the Marble Arch gate at Oxford Street and Park Lane."

At Windsor the Thames was wider but there was no time for scenery now. It required only a motion for Alan to pick out the railway and then with a wide swerve the *Flyer* headed into the thin haze ahead.

“What time is it?” asked Roy reopening his log.

“One fifteen o’clock,” answered Alan, his voice trembling, “English time.”

“It ’s twenty-one miles to Fleet Street,” said Buck at once. “It must be about three miles to the Arch from Fleet Street. You ’ve got eighteen more miles—”

“That ’s ten minutes,” exclaimed Ned. Catching Roy by the arm he motioned to the store room ladder. “We ’ll go below and get ready. When you pass Paddington lift her to about one thousand feet and then do a wide spiral. Unless we give you the word through the tube you ’ll have to stop. If they ’re ready for us Roy ’ll pass the word ‘go ahead’ and I ’ll drop the stuff. Then hit it up for Acton. Keep your place, Buck. If we stop, both stand by the wheel. It may be a race with the police. Don’t leave the wheel, either of you. Bob ’s at the engine. Roy and I ’ll do the work below.”

In a few moments the engine room trap was open and Captain Ned was on the floor getting his first view of London.

CHAPTER XXI

THE MARBLE ARCH GATE, HYDE PARK

When Buck Stewart finally pointed out the long, black train sheds of the Paddington station and Alan began lifting the *Flyer* to the thousand foot level, the eyes of every one aboard the airship—except Bob at the engine—were searching for the Mecca of the three thousand mile voyage, the celebrated Hyde Park.

“There,” announced Buck at last pointing over a mass of irregular brown buildings between which, here and there, rose clumps of green where little squares and crescents gave color to sooty chimney pots and roofs of drab. “See the trees?”

Beyond a row of these, marking Bayswater Road, lay a vast oasis of shrubbery. With a long curve to the east and north Alan followed Buck’s continued directions and in a few moments all made out the landmark that each had fixed in his mind—the Marble Arch gate that stands at the Oxford Street and Park Lane entrance to the park. The second thing that caught Alan’s eye

was the mass of people in the park all moving slowly over its open commons as if moved by one impulse. The great coronation was at an end; the royal procession had returned to St. James—on the far side of the park—and West London was making its way homeward.

Ned, below, saw something else. In Oxford street, just without the gate, stood a long, gray motor car. In it sat a chauffeur and standing on the rear seat, a man with a pair of binoculars. The *Herald* representatives were on the ground. As Ned looked, the man dropped the glasses on the seat, sprang from the car and hurried through the ponderous arch. Not until that moment did the people in the park appear to notice the on rushing car. But the exclamations of those first sighting it swelled in an instant into a roar. Ten thousand persons rushed forward and then surged backwards as the airship, pausing in its course, began a giant circle.

Just within the gates the murmuring thousands herded on the "People's Forum," the worn bit of grass where for many years proletariats—socialists, anarchists, the advocates of all new philosophies and 'isms—have been accustomed to make their Sunday stands. To land among these was impossible. To fly along the ground just

above them was perilous. The man who had hastened into the park from the motor car was in plain sight. He was already in company with two other men who had bands of white on their arms.

“What are you goin’ to do?” called Alan through the tube. “We can ’t land here. And you’ll kill someone if you drop the bundle.”

Ned was at his wit’s end. Before he could reply, keeping his eye on the two white-marked men and the one who had used the glass—who seemed to be in charge—he noted that the latter was waving his arms upward and pointing to the gate.

“Keep her up,” Ned called back—Roy repeating the message. “Take another turn or two.”

The three men in the park now made their way quickly to the arch and all sprang into the waiting motor, their leader meanwhile pointing west toward Bayswater Road. With only the loss of a few moments the car turned onto Hyde Park Terrace. Here, in the torrid noonday sun, the hordes coming from the park were keeping in the shade of the trees. The wide, smooth terrace stretched away almost free of vehicles.

“Get over ’em and ahead,” shouted Ned—for by this time all were watching the motor and its

occupants. "The street 's wide enough. Drop down and pass 'em. Get as close as you can."

As if out for a leisurely tour of the park the gray car moved west on the terrace. With one more wide swing Alan brought the *Flyer* to the west and then, as if on a toboggan, the condorlike airship slid directly toward the motor. When it seemed as if the aeroplane would crash into the automobile there was an upward swerve. As if balanced in the air the *Flyer* hung in equilibrium an instant. Those in the motor sprang aside as if to escape the impending blow from the suspended bundle. At that instant the black package dropped directly into the car.

Ned's shout of "All right!" was not needed. The checked airship had to go ahead. And before the order reached Alan the *Flyer* had hurled herself forward again. Barely averting a cab, whose driver was too dazed even to hurl at them a cabby's imprecations, the aeroplane skimmed skyward.

"Up!" shouted Roy through the tube, "Up!"

Knowing then that the precious matrices had been delivered, for better or for worse, Alan threw his wheel over and while Ned lay on the floor watching the astounded occupants of the motor, the airship began climbing skyward with strain-

ing planes, the engines at full speed again. Not a word had been spoken to the men in the automobile. None was necessary.

As the *Flyer* mounted upward and forward Ned could see the motor beneath stop for a moment and then turn quickly in the broad road. A policeman was hurrying toward the motor but the latter did not pause. While the officer ran by its side the motor suddenly jumped ahead and Ned, chuckling, knew it was on its way to Fleet Street. Laughing, he arose and closed the trap door. Then, suddenly, his face became thoughtful. He seemed almost frightened.

For the second time a big crisis in their perilous voyage had been passed with a laugh. A week before, the thought of this moment would have come to Ned as the climax of a ceremony. Now, he had just done that for which he and his friends had risked their lives, with the ease that a bag of peanuts might have been tossed into a monkey cage.

When Ned reached the pilot room Roy had already repeated all the details of what had happened. Both Alan and Buck were elated.

"What 's the matter with you?" exclaimed Buck as soon as he saw Ned's face.

"Nothin'," answered Ned as he took his place

at the lookout. "Nothin' at all. It worked out all right, did n't it?"

But there was a good deal the matter with the young leader. He had just realized what it meant to cross the Atlantic ocean over night and the thought that the *Flyer* had just accomplished an undreamed of feat in the delivery of the *Telegram* matrices almost unnerved him. The great, busy London beneath, scarcely attracted his attention.

But his reverie lasted only a few moments. Buck and Alan were picking out the route to the country rendezvous and Roy's activity aroused Ned. Throwing open and latching the pilot room doors they quickly reviewed the program for the stop.

"We 've been seen, good and plenty," said Alan, "and we 'll likely be followed. If the authorities interfere they must n't be allowed to get away with it. Buck," he added, "you know police and their ways. Stall off anybody till we get our people and the fuel aboard—if the 'bobbies' show up. And we 'll make the shift in rag time."

Buck had never seen Acton and the place was far from being an ideal landing place. But it was not wholly bad. And there was no need to waste time searching for the best ground. Hardly had Alan and Buck decided that they were approach-

ing the agreed upon spot when Buck's eye caught sight of a waiting automobile about a quarter of a mile north of the suburban depot. Just beyond, in the midst of market gardens and on what seemed to have once been a cricket ground, now awaiting the gardener's plow, an auto-truck and another automobile were in sight.

"These folks certainly ain't goin' to be lonesome," smiled Buck. "I 've counted eight men. One o' the cars is a motor truck!"

As Alan began a swinging volplane, Buck, his pilot duties ended, closed his lips and hastened down the store room ladder. Ned was on the port gallery examining the land beneath and the waiting group.

"Ned," began Buck somewhat embarrassed, "what are you goin' to do with all the money you brought along?"

"Probably nothing. I hope so, at least," answered Ned, his eyes still squinting to make out the details of the waiting party still far below. "But why?"

"I don't want to ask these folks for money. I don't know 'em. And I have n't enough."

"Enough for what?" asked Ned, turning to Buck at last.

"Well, I thought—you know you said—I mean I said—I 'd get off here if you 'd bring me along."



THE END OF THE FLIGHT, LONDON.

“You—” began Ned, open-mouthed.

“I know you ’ve got a big load goin’ back. I ’m expecting to get off here.”

“You—” repeated Ned and he stopped.

“I thought may be you ’d think I was countin’ on goin’ back with you.”

“You get ready to yank those supplies on board,” Ned managed to say at last, “and shut up.”

That was the end of the episode so far as Buck was concerned. But when Ned came to talk it over with Alan, the recollection of how Buck had saved his life was enough to make Ned’s words short and choky.

When the heavy *Ocean Flyer* at last sank to the ground and came to a stop—the first in eighteen and one half hours’ constant flight—it was plain that for a few moments at least its crew need fear no molestation. Spectators had not yet begun to collect. One machine stood on the hard, white highway. From it, as the *Flyer* came to a stop, a figure sprang out and rushed across the green. The man who greeted them, Mr. Phillips, the business representative of the *Herald*, seemed to be under greater strain than any of the young aviators who now dropped from the silent *Flyer*.

There was an instant confusion of presentations

in which Ned managed to discover that Mr. Arthur Ballard, a man of about forty-five years with a closely cropped beard and heavy spectacles, and a Mr. Fred Clarke, a younger man of something over thirty, were the reporters who were to be taken to New York. Each had his typewriter and Mr. Ballard carried a case of clothing and a heavy coat.

The younger man's equipment ran largely to a big pipe and some very heavy English tobacco. These were in marked contrast to the silk hat and elaborate afternoon clothes which he yet wore. Clarke had just come from the coronation exercises in Westminster Abbey with no time to change his clothes. And, in the ten minutes' wait, he had been busy on his typewriter with the beginning of his big story.

"Have n't you a coat?" was Ned's first inquiry.

"I have n't even an extra handkerchief," responded the younger reporter. "My stuff is at the office. They picked me up and brought me here directly."

"It 's all right," responded Ned, laughing, "We 've plenty."

Then, while the fusilade of questions rained on the boys, inquiries about the trip and its incidents, Ned and Buck turned over their messages for the

Herald and, answering as best they could, began the important work of taking on supplies.

“Just a moment,” shouted a voice, “I ’d like to get all of you. Mr. Napier, would you mind taking Mr. Phillips’ hand? It ’s a good stunt to raise your hats a la Stanley greeting Dr. Livingstone. ‘Mr. Phillips greeting Captain Napier at the end of the marvelous flight.’ What? Please,” he added.

“It ’s Bowman, the photographer,” explained Mr. Phillips laughing. “And he ’d have put it to King George the same way. We ’ll have to do it.”

Raising his hat, Mr. Phillips stepped toward Ned with outstretched hand. As Ned, a little embarrassed, did the same, Mr. Phillips exclaimed, grasping the boy by the hand:

“Captain Ned Napier I believe!”

There was a snap.

“Once more,” shouted Mr. James Bowman, the irrepressible picture maker and again the London manager and the *Flyer’s* commander were “snapped.” Without taking the time formally to meet those who were to carry him across the sea, Mr. Bowman instantly plunged into a heap of cameras, selected another kind and began a series of photographs of the big airship.

The London party had come to Acton in two motors. Mr. Phillips, his chauffeur and the photographer with his cameras, were in one, and the two journalists and a chauffeur were in the other. The supply auto truck carrying the *Flyer's* stores and an agent was early on the ground. It was now one forty o'clock. Bob and Roy took charge of the London writers while Ned, Alan and Buck threw off their coats and prepared to get the gasoline, carboys of ether and lubricating castor oil aboard and in their proper tanks.

Ned and Alan had no time to act the hosts to the London party. But it was in good hands. Clambering gingerly up the landing ladder Mr. Phillips and the well known reporters went aboard. As their luggage was being stored in the state rooms Mr. Ballard remarked:

"I 'm afraid we 're taking up some one's sleeping apartments. But, sleeping rooms in an airship! Fancy!"

"Don't you bother about that," answered Bob, with a smile. "We loafed, comin' across; took it easy and got some sleep. We 're goin' back on express time. We 're going to be there by two o'clock to-morrow morning," he added nonchalantly. "I reckon we won't have much time to sleep—any of us. Will you?"

"I won't if I 'm not sea sick," answered the older journalist. "But I never miss, going or coming."

Leaving the two journalists and Mr. Phillips to Roy's care, Bob hurried to the assistance of Ned and Alan. The latter put him to work on the engines, still hot from the long strain. The supply store representative was a valuable aid. He had brought with him pumps, pipes and strainers and in a few minutes the engine gallery of the airship looked like the oil room of a liner. The gasoline was tested by the airship's own gauges and then, with the usual precautions, rapidly pumped aboard. Within ten minutes several hundred persons had collected, among them several suburban police. But as these seemed only interested in the details of the big air vehicle and gave no signs of molesting the crew of the airship the preparations for a new flight were continued without excitement.

Buck's work was the handling and storing of a few new supplies and fresh water. This done he joined the London journalists. He received with thankfulness a package of morning and early afternoon papers and then he assisted Bowman, the photographer, in getting his outfit into the third state room and in checking over the require-

ments for a dark room. The photographer had brought developing pans, "hypos" and other liquids.

"If you need a lot of water," suggested Buck, "you 'd better lay it in now. After we get goin' it is n't easy to run back and forth to the store room."

"Good," exclaimed the photographer, "but I won't need it till dark. I 'm goin' to get every kind of a shot before we leave the land. And you can bet I 'll run back and forth unless we 're standin' on end. I 've done pictures in balloons and snapped mountain sheep. Don't bother about me."

Neither Ballard nor Clarke seemed to be specially keen about their coming trip but as it was an assignment each went to it as readily as if he had been ordered to the front in battle. Mr. Phillips was joking with them when Ned and Alan reappeared.

"Are you ready, gentlemen?" Ned asked, looking at his watch.

It was six minutes of two o'clock. Mr. Phillips began shaking hands. The other men nervously drew out their own watches and each smiled.

"We are a little ahead of time but the visitors are gettin' thick. We are ready," continued Ned.

The London manager took Ned's hand.

"I wish you the best of luck," he said soberly.

"Wish us all the highest speed," exclaimed Ned with a smile. "We 've got a job ahead of us that calls for it."

With another good-bye all around Mr. Phillips clambered down the ladder and instantly it was drawn up with a bang.

"Won't you gentlemen go into your rooms until we are under way?" asked Ned with something of authority in his voice.

As they did so each member of the crew went to his post. Alan and Buck took the starboard and port galleries and with insistent demands drove the spectators back. Again and again they yelled until all was clear about the *Flyer*.

"All clear forward," called Alan at last.

"All clear below," yelled Buck in turn.

Slowly the propellers began to move. Then faster until the great ship began to tremble.

"Good-bye," came Mr. Phillips' parting words.

"Good-bye," answered Alan waving his cap as the *Flyer* lifted its huge shape into the air. "Report our departure two one P. M."

The real test of the *Ocean Flyer* had begun.

CHAPTER XXII

EXTRACTS FROM THE LOG OF THE *Ocean Flyer*

“June 22, 2.1' P. M. Left Acton (London). Fair S. W. wind. Thermometer 88°. Mr. Hope at wheel. Magnetic course, N. 55° 30' W. (N. W. $\frac{7}{8}$ W.) Altitude 800 ft. Speed 176 miles per hour.

“June 22, 6.47' 12" P. M. Finished fourth leg W. bound. Heavy S. W. wind. Thermometer 68°. Mr. Napier at wheel. Magnetic course, N. 62° W. (N. W. by W. $\frac{1}{2}$ W.) Altitude 2,800 ft. Speed, 165 miles per hour. East bound speed average of three miles per hour dropped to 2.75 miles. Distance covered, 788 miles. Mr. Napier and Mr. Hope in consultation over loss due to increasing S. W. wind. At 4 P. M., Mr. Ballard was too ill to work. Mr. Clarke busy writing. Mr. Bowman working under difficulties owing to the motion of the ship. Mr. Stewart served dinner at 5.30' P. M. Mr. Ballard did not appear. Mr. Bowman, the photographer, has been forward many times. Interesting descriptions by him of the royal pageant.

“June 22, 7.15' P. M. At present rate of speed New York will be reached in 19 hours and 30 minutes. Deducting time gained, in 14½ hours or at 4.30' A. M., June 23. Wind strong and steady S. W. Thermometer falling, 65°. Present speed, 2.72 miles per minute or 163 miles per hour. Mr. Napier and Mr. Hope have gone over all calculations.

“June 22, 7.25' P. M. Mr. Ballard has asked that Mr. Stewart be assigned to take dictation on his newspaper work. Seems very ill. Mr. Clarke complains of the cold and has borrowed a sweater.

“June 22, 7.30' P. M. Captain Napier has decided to rise above wind which continues strong. Passengers not notified.

“June 22, 9.48' P. M. Finished seventh leg W. bound. Got above wind at 7.40' P. M., rising to 4,000 feet; light breeze on that level S. by E. Speed 180 miles per hour. Mr. Hope at wheel. Magnetic course N. 68 W. (W. N. W.) Altitude 6,000 feet. Five hundred and forty miles have been covered since 6.48'.24" total, west bound, 1,328 miles. Miles to New York, 1,890.1. Difficulty calculating speed owing to quick rise and special pressure in anemometer. Mr. Napier and Mr. Hope in frequent consultation. Mr. Russell

is preparing newspaper copy at his engine post. Mr. Stewart yet engaged with Mr. Ballard."

These brief and colorless notes by Observer Osborne give little indication of what was occurring on the *Flyer*. When the last calculation was made just before ten o'clock it was plain, unless a change came at once that the great experiment was to be, in part at least, a failure. With only one thousand three hundred and twenty-eight miles covered in seven hours and forty-eight minutes the problem before the aviators was hard enough.

Although by taking the 6,000 foot level at seven forty o'clock they had escaped the stiff southwest breeze and had since averaged three miles a minute they were now so far behind their schedule that one hundred and eighty miles an hour would not save them from defeat. In addition, the higher flight was telling on all. Mr. Clarke had borrowed an overcoat and was working in gloves. Mr. Ballard was buried under blankets.

"We 've got eighteen hundred and ninety miles before us," explained Captain Ned. "If we can 't beat a three mile a minute gait for that distance, it 'll be nearly half past three o'clock in the morning when we land. That makes it impossible to

get anything—stories or pictures—in the regular editions. And the biggest card of our assignment is to get these things in the regular editions. An ‘extra’ will take the edge off success.”

“Well,” said Alan determinedly, “you know we always have a last resort. It means compressed air and polar temperature. But, there ’s the high altitude!”

“A shade under three miles and a half a minute will do it,” Ned announced.

“That ’s over two hundred miles an hour,” suggested Roy.

“It ’s three and forty-two hundredths miles a minute,” added Ned, “or two hundred and five and two-tenths miles an hour. We ’ll try it!”

“Can you watch the compressed air tubes and gauges and keep up your other work?” asked Alan, turning to Roy.

“We ’ll have to do that,” broke in Ned. “Let Roy stick to his work. He ’s got to watch the aerometer readings and the wind pressure chart. We ’ll all know when the *air* is wrong, but his speed figures must be watched.”

“Are you goin’ to tell our passengers?” asked Roy.

“We ’ll have Buck watch their rooms and open the foul air exhausts when it ’s necessary,” sug-

gested Ned. "Bob can watch the lower compartments—"

"How about the temperature? If we get down below freezing, they 'll know that something is wrong," Alan exclaimed.

"We 'll cross that bridge when we reach it," argued Ned.

This decided, Ned hastened below to advise Bob of the desperate chance to be taken. Together the two boys overhauled the heavy clothing in the store room and got it into the pilot house.

"I hope it won't get too cold," Bob said in the midst of their efforts. "I 'm workin' on my story of the trip across and back." He showed Ned a bunch of neat copy. "I 'm keepin' it down but it 's a pretty big story."

When Buck was summoned from Mr. Ballard's stateroom, he received the notification of what was to be done, with no excitement. It was apparent that his present work almost wholly engrossed his thoughts.

"How 's your patient?" asked Alan laughing.

"Mr. Ballard? Oh, he 's all right. I mean he 's all wrong. That is, he 's still sick. He 's been asleep."

"Asleep?" exclaimed Ned. "And what have you been doin' meanwhile? Holdin' his hands?"

"Why, I 'm writin' his story."

"While he 's asleep?"

"Sure! Why not? Someone has to do it. But—ssh! Don't say a word to that fellow Clarke!"

"How are you writin' if he 's asleep?" persisted Ned curiously.

"Oh, he told me a lot himself and then there 's the papers they brought aboard—"

"And you 're makin' a story out of that? When you were n't near the place!"

"Mr. Bowman was!" went on Buck chafing his stiffened fingers. "And I think he saw more than Mr. Ballard did. I 'm gettin' along all right."

"Well," exclaimed Alan, "be sure that our guests do. We 're goin' up considerable and if you get too busy 'assisting' Mr. Ballard you may kill 'em all. Watch your exhausts in the three rooms. Don't suffocate yourself and them—"

"What time is it?" broke in Buck, his mind back on his work already.

"Ten o'clock!"

"Oh, that 's all right. I 'll be through by one or half past—maybe."

"And at twelve o'clock," said Ned, "remember that coffee and food is due."

With a last examination of all ports and doors, at ten o'clock, Ned at the barometer and baro-

graph and Roy at the aerometer and statoscope, Alan headed the *Flyer* still further skyward. At twelve o'clock, midnight, the following entry appeared in the *Flyer* log:

“June 22, 12 midnight. Have made 439 miles since 9, 48' 24". Time between observations 2, 11' 36" or 3.33 miles a minute. Between 3.40 and 3.50 miles a minute expected on 1,451.1 miles yet to be covered. All suffering from cold. Thermometer 6° above zero. Altitude 24,612 feet. No trouble with fuel or oil. Lubricator heaters turned on at 10.30 o'clock. Air funnel working well but must be watched closely. On instructions from Captain Napier New York time now substituted for London time. New York time of this entry is 7 P. M.”

For seven long hours after this entry was made in the log of the *Ocean Flyer*, the giant airship sped like a shooting star toward the distant west. Above the clouds and above the unseen sea, it held its course with never a lessening beat of its ceaseless engines. To most of those within the spectre shape, time and distance had now lost their meaning. Each port and window was heavy with frost and each occupant was shivering from the intense cold. By ten o'clock few sounds were heard except the heavy purr of the engine and the vibrant

notes of the great wings as they cracked in the wintry air. Talk had ceased except in the few low words that passed at intervals between the man at the wheel and Roy at the observer's table—the limbs of the latter stiff under the furs he wore but his brain active under the pressure of the work that meant so much to all.

Mr. Ballard was yet silent beneath extra clothing and blankets. In the next room the photographer shivered beneath the doubled bed covers. Buck and Mr. Clarke sat with Bob in the engine room, cold but philosophical, making talk of the journey and what it meant. After thirteen hours of work, the coronation story and Mr. Bowman's pictures were ready for the *Herald*. Copy and pictures, carefully marked and sealed, were enclosed in wrappings. Four hours more and the strain would be at an end—or worse.

A stupor had fallen on the physical activity of Ned, Alan and Bob. But their mental alertness had not dulled. With no more words than were necessary, the three young men guided the wonderful craft onward as they steeled themselves against the dread of failure and the numbing cold. Just after ten o'clock, New York time, Buck served hot tea to the silent ones in the pilot room.

“We 're almost over the ocean, are n't we?” he asked, chattering.

"I think we were over Newfoundland about nine thirty o'clock," answered Ned in a tired voice. "What 's the time, now?" he asked abruptly of Alan who was then at the wheel.

"Ten six," was the brief answer.

"And the course?" he added, facing Roy.

"West, one-half south," answered Roy without spirit. It was the third time he had announced this in the last half hour. By his figures the *Flyer* was over Fogo Island at 9:36 P. M.

"What d' you know about that?" yelled Buck climbing awkwardly down the ladder. "We 're over America again—a half hour ago."

"How far is it now?" asked Mr. Clarke, slowly as if the words were an effort.

"Only eleven hundred miles," answered Bob.

"Eleven hundred—?" sighed the London reporter. Then he became silent and his head sank between his numb, gloved hands.

At eleven o'clock Buck and Bob prepared food—soup and coffee. Mr. Ballard and the photographer were the only ones who ate nothing. The *Flyer* was now at an altitude of 31,000 feet and Captain Napier took his coffee standing with his eyes on the compressed air gauge. A few pounds too much pressure and all felt the extra supply by the pains in their chests and heads. The ther-

mometer had now dropped to two degrees above zero.

When the chronometer showed twelve thirty o'clock, Roy prepared to make a new calculation. He climbed down the ladder for a cup of tea to quicken his brain. Bob alone was awake. But he sat gazing stolidly at the engine and did not even notice Roy's entrance. The London reporter and Buck sat crouched together and sound asleep. With a supply of tea for Alan and Ned, Roy returned to his desk. Wearily getting the time again—and the thirty-four hours in which he had been doing this constantly, seemed a week—he read his aerometer, calculated the wind pressure charts and then, to his last figures, added the advance.

"Captain," he said at last, "we 're only a little over three hundred miles from New York."

For a moment this seemed to have no special significance. Then Ned aroused himself.

"It 's only two hundred and five miles from New York to Ipswich. Are we goin' to make it?"

"It 's twelve thirty o'clock now," was Roy's answer. "Our calculated position is three hundred and nine miles out."

"And what can we do that in?"

Rousing himself again, Roy figured a few moments.

"One hour, thirty-four minutes and forty-eight seconds," he reported.

"That 's nearly five minutes after two, is n't it? Well, it 's close enough."

"Had n't we better come down?" asked Alan as he tried to warm his left hand under his arm. Ned looked at the barograph. It marked 29,640 feet.

"To one thousand feet," he responded.

"Watch your gauge and pressure," suggested Alan and, as he depressed the *Flyer's* bow, Ned recharged the ship with compressed, polar air. Gradually the airship sped toward the earth. In two minutes the crisply glittering stars winked out and the *Flyer* was in an opaque mist. In two minutes more a patter on the frost covered windows alarmed the boys. Then Roy arose and unlocked the port door. A gust of rain swept into the room. At the same moment the cabin lights paled and then a fog filled the compartment. The boys lost sight of each other and of the instruments near them.

"We 're in a fog bank!" exclaimed Roy.

"It 's our own," shouted Ned. "We 're near the ground and it 's June. The car was filled with zero atmosphere. It 's condensing."

"Everything 's covered with water," added Alan.

Ned groped about and threw open all ports and doors. The fog cleared almost as quickly as it came. In four minutes the thermometer jumped from 2° above zero to 65° . As the comparatively hot wave rolled into the car Alan dropped lower, looking for lights or landmarks. The quick drop again interfered with Roy's figures but at 12.45 o'clock Alan relieved all doubt.

"Two fixed white lights," he shouted. "Looks like Thatcher's Island lighthouse. Hold the wheel while I peel these togs."

At the same moment the door of the adjoining state room opened and Mr. Arthur Ballard, encased in sweaters and a fur coat, exclaimed:

"The roof is leakin'. I 'm soaked through." The thermometer was now 78° . "Where are we?"

"Ipswich, Massachusetts," exclaimed Roy. "Change cars for Boston."

Tossing his polar garments to the floor Roy made this entry in his log:

"June 23; 12, 59' 11" A. M. Thatcher's Island light abeam to starboard. Between 12.30 and 12.40 A. M. descended from 29,640 feet altitude to 700 feet. Temperature rose from 2° above zero to 78° . Rain falling and weather sultry. Ipswich, Mass., lights ahead. Course for New York, Battery, S. 79° 30' E. (E. by S.) Last leg 210

miles. Low level speed 180 miles an hour. Probable time of end of journey 1, 10' plus 12, 59' 11" or 2, 9' 11" A. M. Mr. Napier at wheel again."

With a word to Ned and a nod in reply, Alan hastened below. Those in the engine room were yet swathed in extra clothing and calling for explanations. Seizing Bob, Alan announced the situation—to the relief of all—and then instructed Russell to attempt to get in touch by wireless with the *Herald*. The store room was soon aglow from the flashes of the snapping condenser. In fifteen minutes Bob's call was answered. Then, with short interruptions, this message was forwarded:

"*Ocean Flyer* west of Ipswich one o'clock on time all well Ballard Clarke Russell stories ready pictures O K best time two hundred five two-tenths miles hour highest altitude thirty-one thousand feet coldest weather two degrees above zero reach office few minutes after two congratulations *Herald* enterprise answer."

Within a few minutes came this message in reply:

"Congratulations unparalleled success presses waiting, estimate exact time arrival if possible. *Herald*."

"Two ten," flashed the answer.

Then, a little later, followed this wireless to the *Herald* operator:

“Forward Chicago Mary Hope Beverly Hills. In America again safe and well. Alan and Ned.”

But the wireless figures were not exactly correct. Picking out lights, the detour to find South Norwalk, a slow-down in the Sound as the bridges were approached and then the rise as the *Flyer* headed over the sleeping metropolis to trace its way north by the winking lights of Broadway, threw Roy out in his calculations. When the green lights marking the signal diamond on the *Herald* roof flashed out no one on board noted the hour. Checking and sinking between the buildings on either side, the *Flyer* floated over *Herald* square. As a bag dropped on the *Herald* roof with a crash the manager of that newspaper glanced at his watch. It was twelve minutes after two o'clock.

At the moment Ned whirled the wing wheel for a new lift a loud voiced boy dashed from the rear of the *Herald building*.

“Here y 'ar; extry papia; all 'bout big airplane crossin' 'Lantic ocean; papia, double extry *Hurld!*”

On the first page of the damp sheets under the boy's arm—and the first loaded wagon of extras was now rattling down Broadway—was the story Buck and Bob had written three days before. In display type above this was printed this bulletin:

“The first aeroplane to cross the Atlantic Ocean reached the *Herald* office at ten minutes after two o'clock this morning. It left London at one minute after two o'clock yesterday afternoon. Distance traveled 3,218.1 miles. Time, twelve hours and eight minutes. Highest speed, 205.2 miles an hour. Greatest altitude, 31,000 feet. Lowest temperature, 2° above zero. The monster triple-planed *Ocean Flyer*, with a daring crew of five men, has conquered the air at last. Under the auspices of the *Herald* and *Telegram*, Captain Ned Napier and his associate Alan Hope, left New York Wednesday, June 21, at one o'clock, twenty-one minutes and twenty-two seconds in the afternoon. Their monster aeroplane successfully crossed the Atlantic—traversing Massachusetts, the Gulf of Maine, Nova Scotia, Newfoundland, 1,709 miles of trackless water, Ireland, the Irish Sea—and delivered the plates of the *Telegram's* special coronation edition safely to the *Herald* representatives in Hyde Park, London, at twenty-five minutes after one o'clock the next day. The story of the preparations for these marvelous feats, with a full description of the *Ocean Flyer*, its unique ideas and a detailed account of its now celebrated crew, appears below.”

Then followed a full page of the matter that

Bob and Buck had written and a graphic story, written by night city editor Latimer, of how the *Herald* discovered the *Ocean Flyer*, of the "beat" that was not printed and a full account of Ned Napier and Alan Hope, the "Airship Boys."

When the *Ocean Flyer* reached the yards of the aeroplane factory in Newark fifteen minutes later and came to a final stop, there was no more demonstration than might have followed a half hour's flight out over the marshes. President Atkinson was awaiting his friends. As he took Ned's hand he handed him a telephone message just received. It read:

"Heartiest congratulations to Captain Ned Napier and his associates on accomplishing the greatest feat of the age; an airship journey from London to New York in twelve hours. Consider contract carried out. Editor *Herald*."

This is the sixth story in the AIRSHIP BOYS Series. The seventh is entitled THE AIRSHIP BOYS AS DETECTIVES Or, Secret Service in Cloudland. This worthy successor of the OCEAN FLYER deals with the fascinating task of guarding both frontiers of the United States, bringing into play the most modern and effective means—the airship. Accurate information—exciting situations—rapid action—thrilling adventures—make this story one every boy will want to read.

For other titles in this Series see Page 2.

